HC
111
I4

Industrial Canada

v. 15, no. 1-9

(1917 - 1915)

Vol. XV., No. 1 AUGUST, 1914 $2.00 per Year

HC
111
I4
V.15
no.1

INDUSTRIAL CANADA



58 Adelaide 1913

ADVERTISING COUNSEL

It is as advisable to know what ***not*** to do, as it is to know what to do and when to do it.

Many advertisers find it profitable to pay us a substantial retaining fee, in order that we may guide them away from the pitfalls of publicity.

If you spend more than $1,000 a year in advertising it may pay you to employ us as counsel.

Why not write us about it? There is no obligation involved.

J. J. GIBBONS Limited

AGENTS FOR ADVERTISERS

Coronation Building
MONTREAL

119 West Wellington Street
TORONTO

Tribune Building
WINNIPEG

Cable Address—"GIBJAY," Toronto

Code—A.B.C. 5th Edition

PUBLISHED BY THE CANADIAN MANUFACTURERS ASSOCIATION INC.
HEAD OFFICE · TORONTO
BRANCH OFFICES

MALLEABLE IRON CASTINGS

The Pratt & Letchworth Company Limited

BRANTFORD ONTARIO

EUGENE F. PHILLIPS ELECTRICAL WORKS, LIMITED

GENERAL OFFICES AND FACTORY, MONTREAL — CANADA — TORONTO BRANCH, TRADERS BANK BUILDING

BARE AND INSULATED ELECTRIC WIRE

Electric Light Line Wire, Incandescent and Flexible Cords

RAILWAY FEEDER AND TROLLEY WIRE

Americanite, Magnet, Office and Annunciator Wires, Cables for Aerial and Underground Uses.

Branches—HALIFAX, TORONTO, WINNIPEG and 1144 HOMER STREET, VANCOUVER.

QUALITY

"No good man did, or ever should encourage cheapness at the ruinous expense of *unfitness*, which is always infidelity, and is dishonorable to a man. If I want an article let it be genuine, at whatever price; if the price is too high for me, I will go without it, unequipped with it for the present,—I shall not have equipped myself with hypocrisy at any rate. This, if you will reflect, is primarily the rule of all purchasing and producing men."—*Thomas Carlyle.*

WHEN we commenced refining Crude Petroleum at our works, Ashbridge's Bay, Toronto, about seven years ago, we nailed our colors to the mast of QUALITY. That's why our different products have gained such an enviable distinction.

WE MANUFACTURE

GASOLENE	BENZINE	LAMP OILS
FUEL OIL	GAS OIL	PARAFFINE WAX
AUTOMOBILE OILS	GREASES	ASPHALTIC ROAD OILS

LUBRICATING OILS FOR STEAM, MOTOR AND ELECTRIC PLANTS

The BRITISH AMERICAN OIL CO. Limited

REFINERS

BRANCHES
Montreal, Ottawa, London

HEAD OFFICE
Lumsden Building, Toronto

WE MAKE THAT GOOD OIL!

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COTTON & WOOL WASTE

Made in Canada by

The Dominion Waste Mfg. Co. Limited, Toronto

BRANDS:

Cotton Polishing: Cream, White.

White Cotton Wiping: XXX Extra, X Grand, XLCR, X Empire, X Press.

Colored Cotton Wiping: Fancy, Lion, Standard, Popular, Keen.

Wool Packing: Arrow, Axle, Anvil, Anchor.

Washed Cotton Wipers: Select White, Light Colored, Dark Colored.

Packed in Compressed Bales
500, 200, 100, 50, 25, 10, 5 lbs.

No liquid dope or clay used in any of our brands—nothing but threads.

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Manufacturers and Jobbers

TORONTO
MONTREAL

Also headquarters for Cordage, Twines, Cotton Duck Oiled Clothing, Etc.

WASHED COTTON WIPERS

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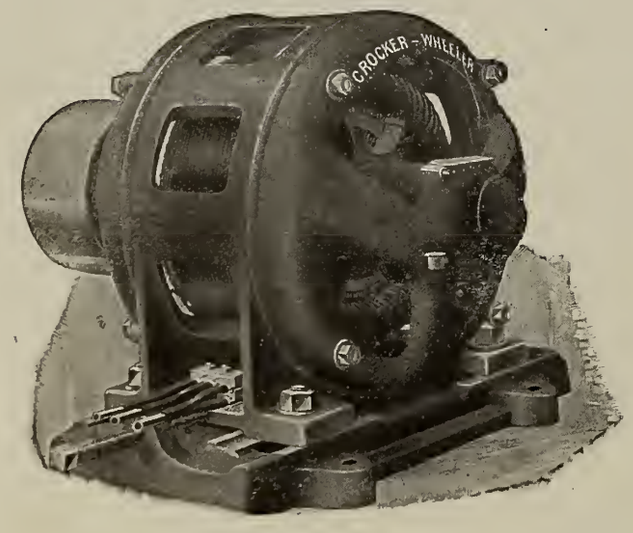
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THE DESIGN OF

CROCKER-WHEELER INDUCTION MOTORS

INCLUDES:

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features; Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works: St. Catharines

District Offices: Montreal, Toronto, Vancouver

Street Car Advertising

reaches more people for less money than any other form of advertising.

The above is a bold statement to make, but when we tell you that we place a big, commanding advertisement, 11 x 21 inches, before over 48,000 readers for one dollar we are not afraid of contradiction.

DOMINION GOVERNMENT RETURNS

Give the total traffic on our lines for the year ending June 30th, 1913, at 633,525,368, a daily average of 1,735,685. This enormous circulation you can purchase for a whole year for $13,118.40 or over 48,000 prospects for every dollar you spend with us.

Do you wonder that our accounts from manufacturers are of three, five and ten years' standing ?

THE SPACE IS LIMITED

and only those who speak first and can measure up to our standard have a chance to get in this year.

Any of our offices will be glad to hear from you, and will give you the fullest information without obligation on your part.

The Canadian Street Car Advertising Company, Limited

MONTREAL TORONTO WINNIPEG

HOW DOES YOUR PRODUCT LOOK WHEN IT ARRIVES AT ITS DESTINATION?

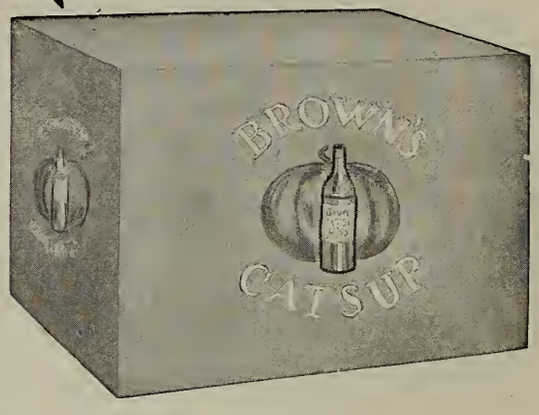
Do you want it to reach your customer or agent in a battered, splintered case, bruised and damaged—do you want your customer to get that kind of first impression? Do you like to be always negotiating over the replacement of damaged goods and return freight charges?

H. & D. Corrugated Board Fibre Boxes

Or do you want your product to arrive in a condition that will draw further trade instead of repulsing it? Clean and fresh—just as attractive as when it was packed? Don't you want your printed label on the package to be fresh and readable and the consignee's name perfectly legible and intelligible?



will protect your shipment against water, damp, damage—and the goods will be removed by your customer in justas good condition as when packed. Wood has become so expensive that it is not economy to use it for packing cases. But even if H. & D. Corrugated Fibre Board Boxes were not cheaper, they would still be vastly superior for any package weighing less than 100 pounds. Although they cost less and are a great deal lighter, they are five times as strong and have greater carrying power. The cellular construction of the board makes the cases so resilient that they will stand most extraordinary rough handling and abuse.



Trim Down Your Freight Bills

Save on each shipment the unnecessary expense occasioned by the greater weight of wood. H. & D. Corrugated Fibre Board Boxes will help you to make this saving and will put the shipment into your customer's place of business in better condition. Not only do the contents of the case go better in H. & D. Corrugated Fibre Boxes, but the box itself with its attractive monogram in colors, retains its freshness and attractive appearance when a wood box would be cracked and battered and not fit to be receipted for at the customer end.

Write us what you ship and ask for our free booklet "How to Pack It." We want to prove to you that you need H. & D. Corrugated Fibre Board Boxes in your business.

Let Us Design a Sample For Your Product

No matter what you have for shipment, we can design a better, cheaper, more satisfactory packing case than you are now using — a case that will save you 10 p.c. to 87 p.c. in freight charges — 25 p.c. to 50 p.c. in packers' time — 90 p.c. of your storage space. A saving in freight charges because the H. & D. Corrugated Fibre Board Cases are so much lighter than wood. A saving in packers' time because an H. & D. Case can be set up and sealed in one-half the time a wood box can be procured and nailed. A saving in storage space because a thousand H. & D. Cases can be stored in the space ten of your wood cases now occupy. We will gladly design a specimen case for you to specially fit your needs—that you may examine and test and prove. This will cost you nothing —involve no obligation. It will illustrate not only the economy and the efficiency of H. & D. Cases, but the better advertising value.



Write us to-day for full information.

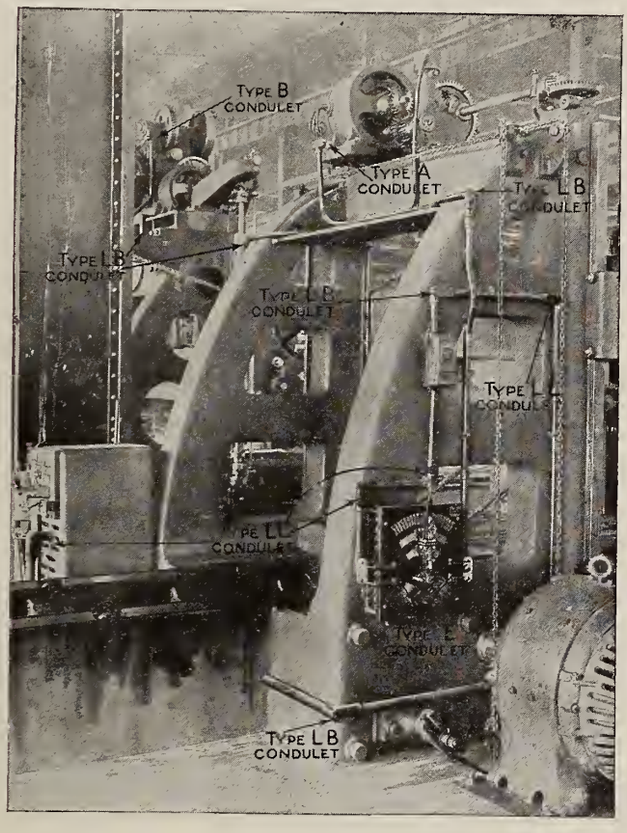
THE HINDE & DAUCH PAPER CO.
LIMITED

TORONTO CANADA



Do You Know Condulets?

Let Us Tell You a Little About Them and Show You a Picture



THE advantages of direct motor-drive for machinery over counter-shafting are no greater than those of Conduit wiring as compared with exposed wires.

Just so, Condulets are superior to all other forms of conduit outlet boxes, because they impart to an installation the maximum of convenience, strength, rigidity and good appearance.

Examine the pictured installation at the left.

Note the perfect fit of the Conduit around and over the great planer. Condulets made these neat right angle turns possible.

Note the wire-outlets — exactly what was needed to meet the requirements. They are Condulets.

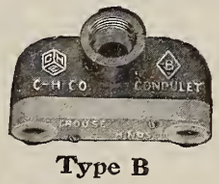
It's an up-to-the-minute installation, thanks to Condulets.

How is your machinery wired?

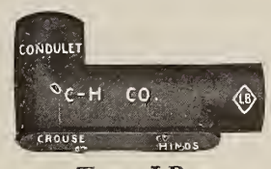
There's a type and size of Condulet for every need. All are shown and described in Catalog No. 1000.



Type A



Type B



Type LB



Type E



Type YC



Type LR

Here are the Condulets used in the installation pictured above.



Type LL

New Condulet Catalog No. 1000 is the Most Complete Electrical Catalog Ever Published. Copy free, if you use Coupon. ☞

CROUSE-HINDS CO. OF CANADA, Limited

Main Office and Works:

TORONTO, ONTARIO, CANADA

Kindly send me New Condulet Catalog No. 1000

Name .....

Street .....

City ..... Prov. .....

1C714



Special Brass Screw Machine Parts

YOU can get them promptly from the NAMCO plant at Montreal. Rapid automatic machines and systematic handling are assurance of rapid deliveries.

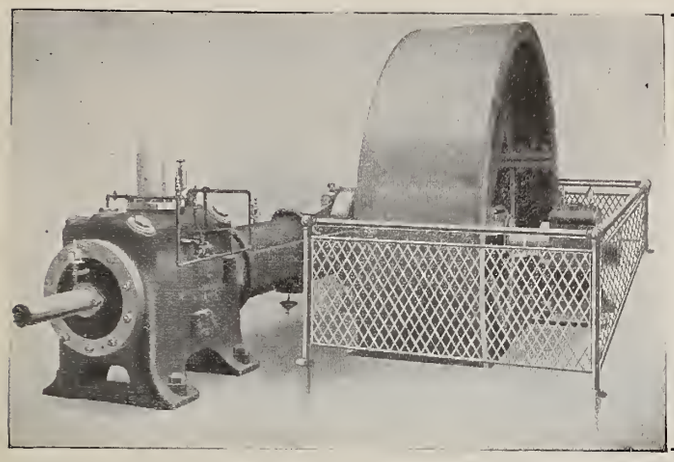
From the quality standpoint products are cut accurately to your model, carefully finished and packed—*ready to use* when you get them.

Capacity—Special Brass Parts for every trade requirement, also steel and iron parts. Sizes from the smallest up to 2¼" diameter and 10½" in length. Estimates on your screw machine work urnished from samples or blue-prints.

For your Standard Screw and Nut supply we have in stock:—"V" and U.S.S. Cap and Set Screws and A.L.A.M. Cap Screws; "V" and U.S.S. Semi-finished Nuts; A.L.A.M. Plain and Castellated Nuts and Hexagon Brass Nuts. Shipment is made the day your order is received.

BOOKLETS FREE
"Canadian Products" showing 200 special parts made for the trade. "Milled Products," listing the standard NAMCO screws, nuts, etc.

THE NATIONAL-ACME MANUFACTURING CO.
MONTREAL P.Q.
IN ST. HENRI AT G.T.R.



Fool-Proof Your Shop

Protective devices for dangerous machines are the order of the day. The elimination of the sense of danger, among employees, pays for such equipment by promoting freedom of movement, resulting in more efficient service.

THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON
CANADA

JULIUS COHEN & JOSEPHY

BRADFORD BERLIN TOURCOING BOSTON

FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. *Write for prices to*

H. V. ANDREWS, Canadian Representative **32 Church Street, Toronto, Canada**

More Holes Per Dollar of Cost

That is the real test of Drill efficiency. ***Wilt Twist Drills*** will give you more holes per hour—

More hours of service before wearing out.

And every hole will be absolutely accurate and uniform.



Wilt Twist Drills are made by a new automatic process that machines the drill complete at a single chucking—work that requires 5 to 7 chuckings under old processes.

The Wilt process insures absolute accuracy and uniformity, it insures a drill that is perfect in contour and correct in its proportions.

Wilt Drills are hardened in automatically controlled electric furnaces to exactly the right degree of hardness for the work intended. **Try a Wilt Drill on your hardest job.**

THE WILT TWIST DRILL COMPANY OF CANADA LIMITED

WALKERVILLE, ONTARIO



A New Product

Made by the Oxy-Acetylene Process.

STEEL TUBULAR STEP LADDER

Made for

Strength, Safety and Durability

If you are going to make metal goods, consult us, and do it the Oxy-Acetylene way! Ask for Our Booklet.

We invite correspondence, especially from manufacturers.

L'Air Liquide Society

MONTREAL	TORONTO	WINNIPEG
Maisonneuve	Boler St.	325 William Ave.

The Canadian Bank of Commerce

Paid-up Capital	$15,000,000
Rest	$13,500,000

DRAFTS ON FOREIGN COUNTRIES

Every Branch of this Bank is able to issue, on application, drafts on the principal points in the following countries:

Africa	France	Peru
Arabia	French Cochin-China	Philippine Islands
Argentine Republic	Germany	Portugal
Australia	Great Britain	Roumania
Austria-Hungary	Greece	Russia
Belgium	Holland	Servia
Brazil	Iceland	Siam
Bulgaria	India	Siberia
Ceylon	Ireland	Soudan
Chili	Italy	South Africa
China	Japan	Spain
Crete	Java	Straits Settlements
Cuba	Malta	Sweden
Denmark	Manchuria	Switzerland
Egypt	Mexico	Turkey
Faroe Islands	Norway	United States
Finland	Panama	Uruguay
Formosa	Persia	West Indies

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . .	$25,000,000
Capital Paid up	$11,560,000
Reserve & Undivided Profits	$13,000,000
Total Assets	$180,000,000

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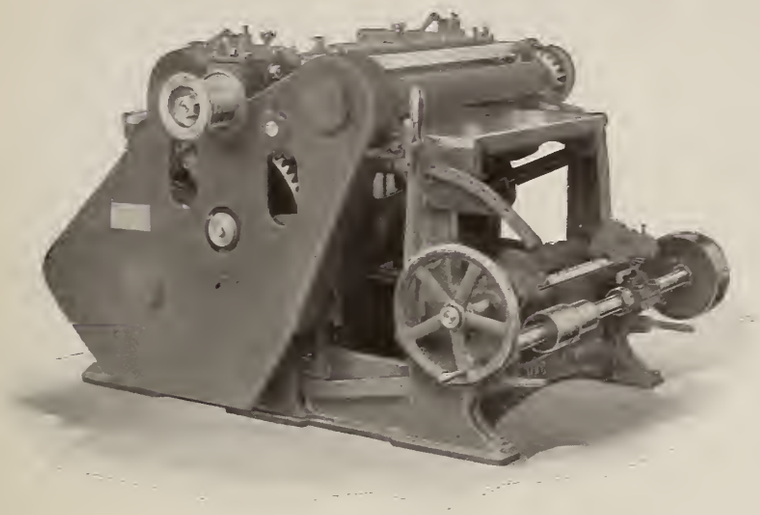
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C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY — Corner William and Cedar Sts

Savings Department at All Branches



Berlin Surfacers

WE have specialized in planing machines for years. Berlin surfacers represent the experience of all these years. You can make no mistake by putting your surfacing requirements up to us. We build surfacers for every purpose. Whatever surfacing you want to do may be done at lowest cost on Berlin.

Are Your Cabinet Surfacers Losing Money For You at the Sander?

Are you thinking of replacing or adding to your present surfacing equipment? Then judge the earning-power of Berlin Surfacers by comparing them with others. Mail your card request for complete data now — so you'll have it for reference when you want it.

DON'T depend on your sander to correct the inferior work of your surfacers. That isn't profitable. The inefficiency of one machine is handicapping the other.

Surface your stock on the Berlin "156" Single Cabinet Surfacer. Then once through at the sander will suffice. And instead of sanding two pieces at one time the uniformity of the surfacing will enable your sander operator to feed stock across the entire width of the machine. Its efficiency is increased 100 per cent. That assures profit, absolutely.

Equipped with round heads carrying thin steel knives, which may be ground and jointed on the machine the "156" produces a finish that shines. Sanding all your stock won't be necessary.

The sturdy construction and the use of only proven design features assures low upkeep cost. There'll be fewer necessary shut downs, less lost time. The top in-feed roll and chip-breaker may be sectional. The wedge method of bed adjustment assures its stability. Fine finish is therefore assured always.

BERLIN MACHINE WORKS Limited, Hamilton, Ont.

Largest Manufacturers of Woodworking Machinery in the World

UNITED STATES PLANT BELOIT, WISCONSIN

Presto-Phone

A Factory Telephone System without a Central Operator



A SWITCHBOARD WITHOUT AN OPERATOR

HAVE you considered the *simplicity, economy* and *efficiency* of the Presto-Phone Factory Telephone System? Have you considered what it will mean in *better service* to be able to check up the work of every department and every man in your factory? With a factory telephone system you will get a greater output from your men — that means a lower cost of production.

Time is Money

YOU save money in your own time; you save money in the time of your employees; and you save money in the better service you give your customers.

Your own time? Yes. If you can keep in touch from your office with every man in your factory, every Departmental Head, every piece of work, you save the time that it would take to visit every corner of your building.

How many minutes a day are wasted in this way or in having a foreman come to you to report on his work? While he is doing that he is unproductive. And his workmen have not his supervision. An important matter, is it not?

Increases Efficiency

A house Telephone system preserves your organization. Every man is in his place. Every man is doing the work allotted to him.

And the central control is perfect. You at your desk have a closer supervision over your factory than the superintendent of the small shop has over his.

No Running Expenses

Our automatic system has no expense after the cost — a very moderate cost — of installation. There is no central operator. A child can use it.

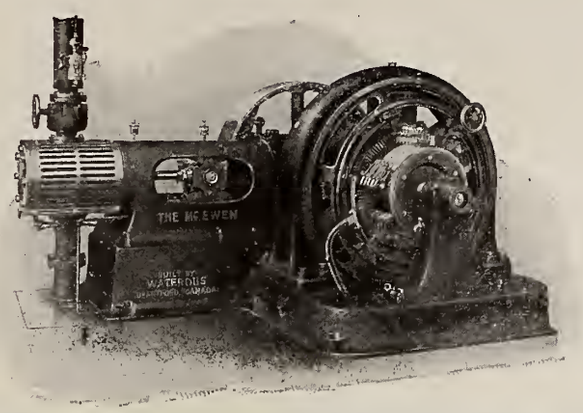
SEND FOR BOOKLET ON AUTOMATIC FACTORY TELEPHONES

You will be interested.

We manufacture all kinds of Telephone Apparatus, Manual and Automatic.

The Canadian Independent Telephone Co., Limited

DUNCAN ST., TORONTO



McEWEN HIGH SPEED AUTOMATIC ENGINES

In the many Isolated Plants which — in spite of the low cost of Hydro and kindred power systems —are still producing their own electric power, you will find McEwen Engines used to a great extent.

There are hundreds of such installations in Ontario alone.

They are kept at work for the very sufficient reason that they are producing power that is not only economical any way you figure it, but that is absolutely reliable as well.

There are no 'Shut downs" because "Something has gone wrong on the transmission line."

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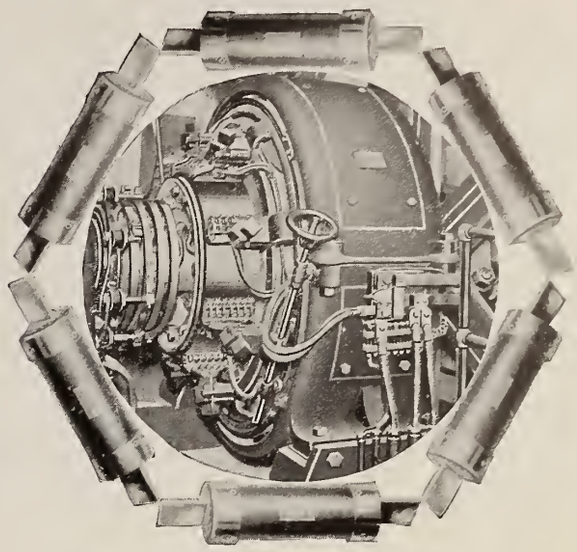
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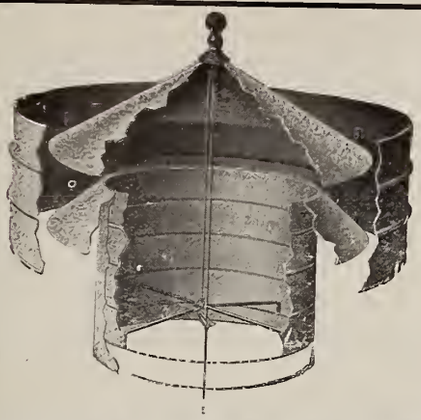
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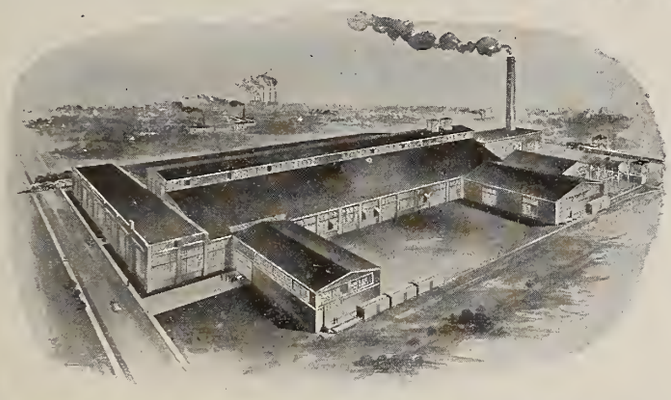


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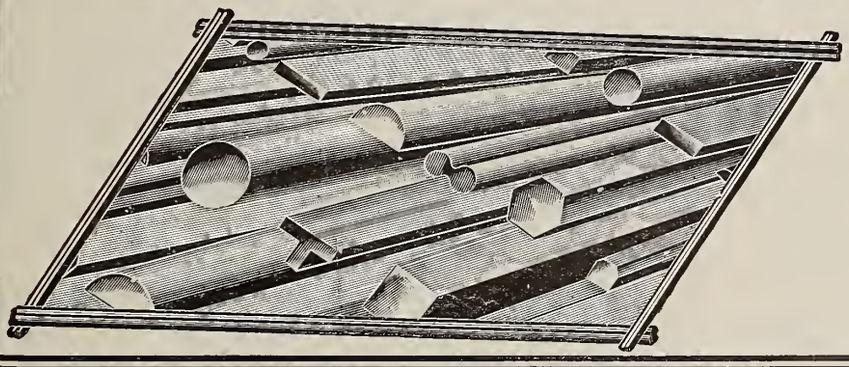
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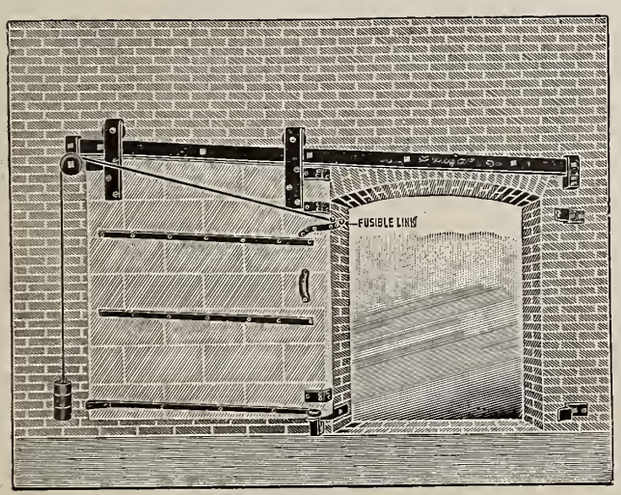
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to

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HON. JAS. S. DUFF, Minister of Agriculture

W. C. McGHIE, Chairman of the Board

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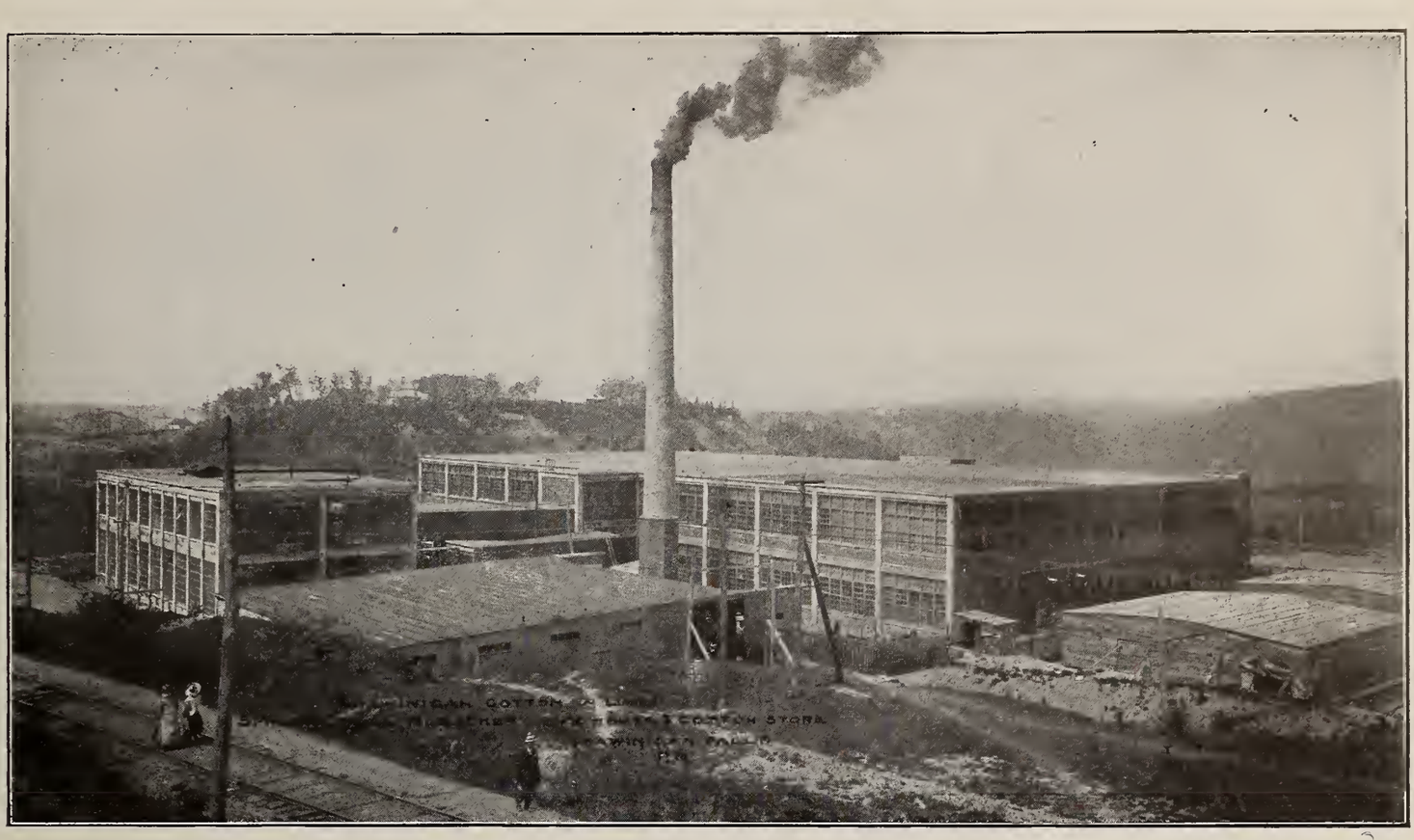
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Consult us when you are considering the erection of a new plant or extension to your present one.

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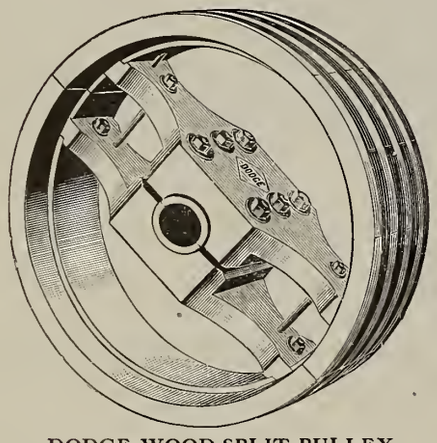
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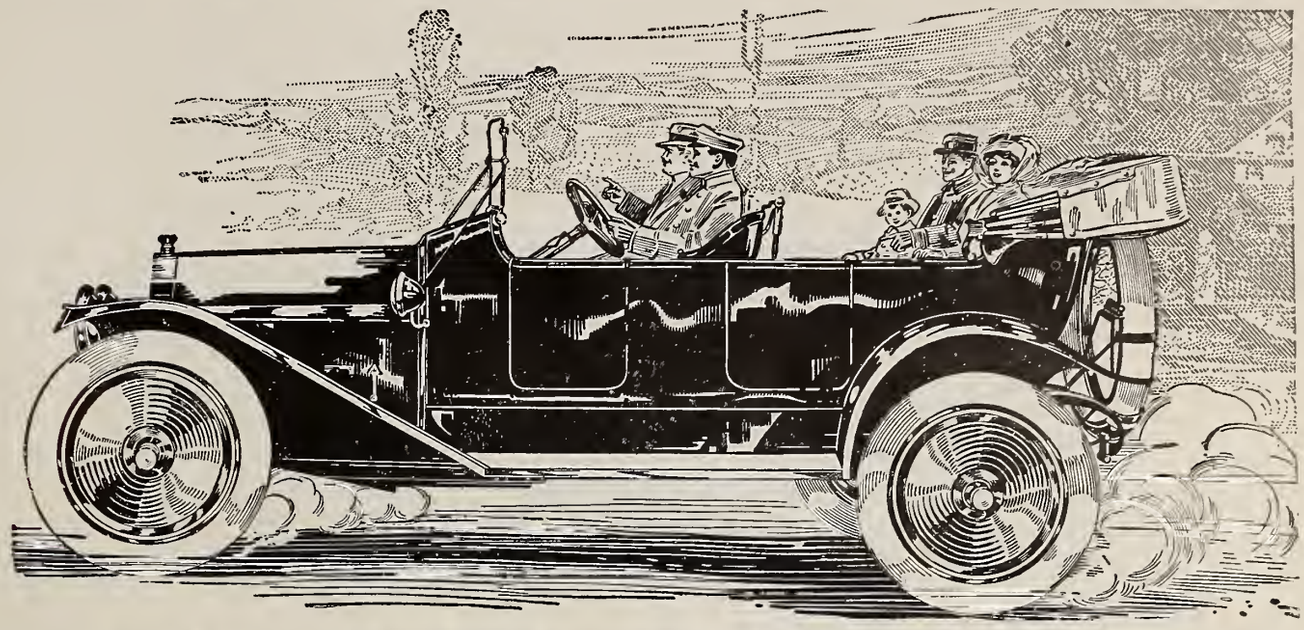
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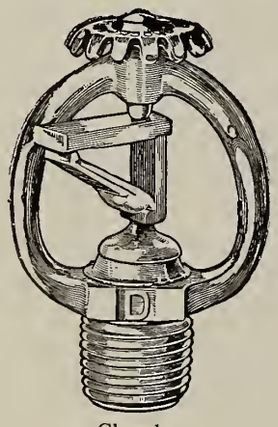
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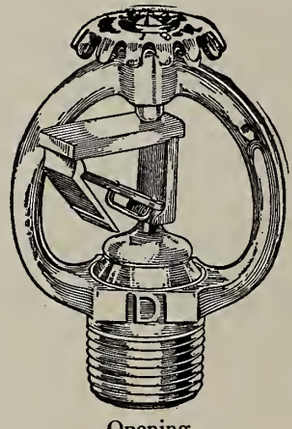


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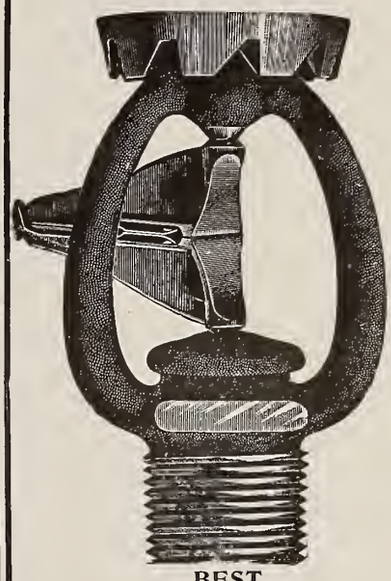


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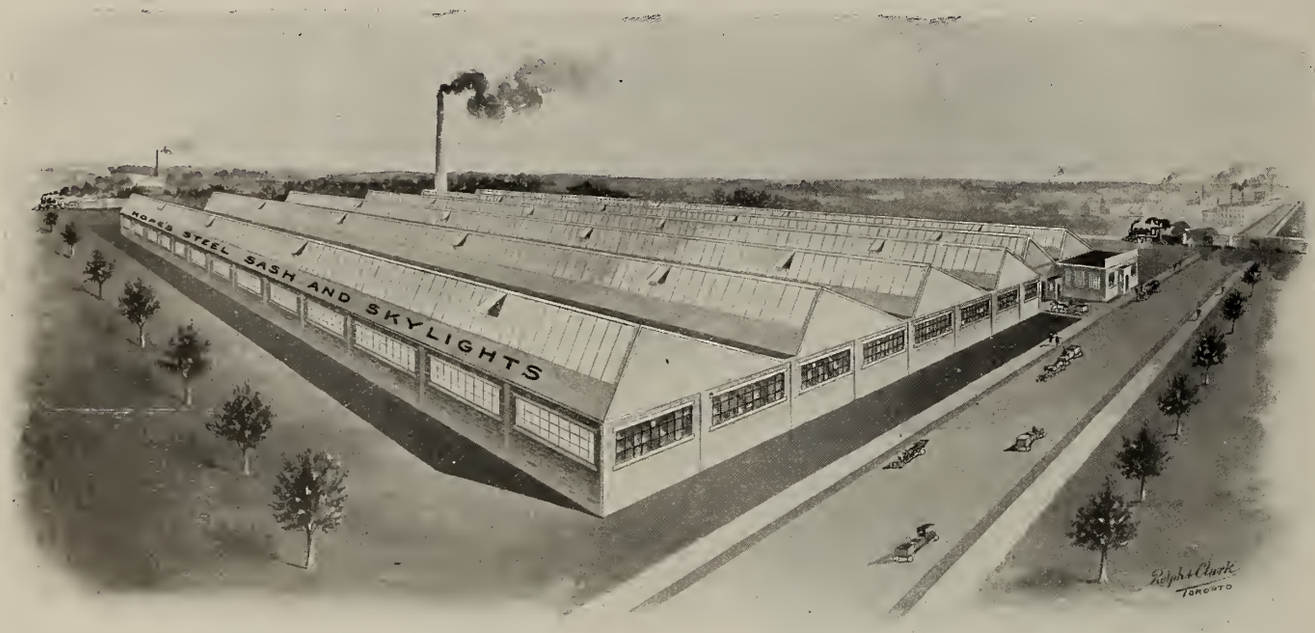
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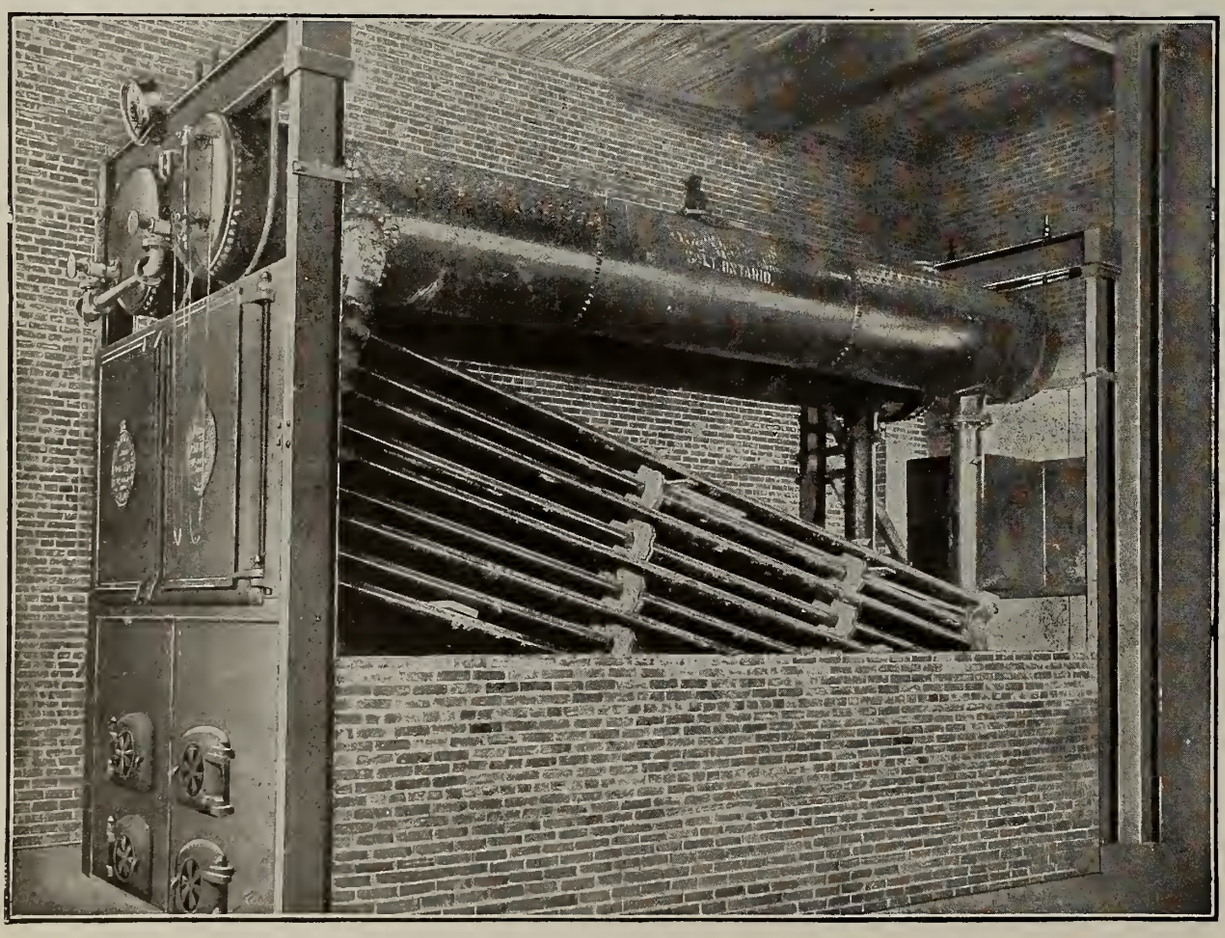


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Conduit and Signal Pipe
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BLACK AND GALVANIZED **STANDARD AND EXTRA HEAVY**

Our modern machinery permits us to cut the pipe in such a manner that the passage inside is perfectly clear, and free from burrs.

Our product has a **Clean Surface**, free from blisters and other irregularities.

Uniformity is a quality found in our pipe, both in material and workmanship, which increases the life and usefulness.

The Thread is of **Even** and **Perfect** cut, which insures a snug fitting with the coupling.

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Church, Bank and Office Fittings, School Desks a Specialty

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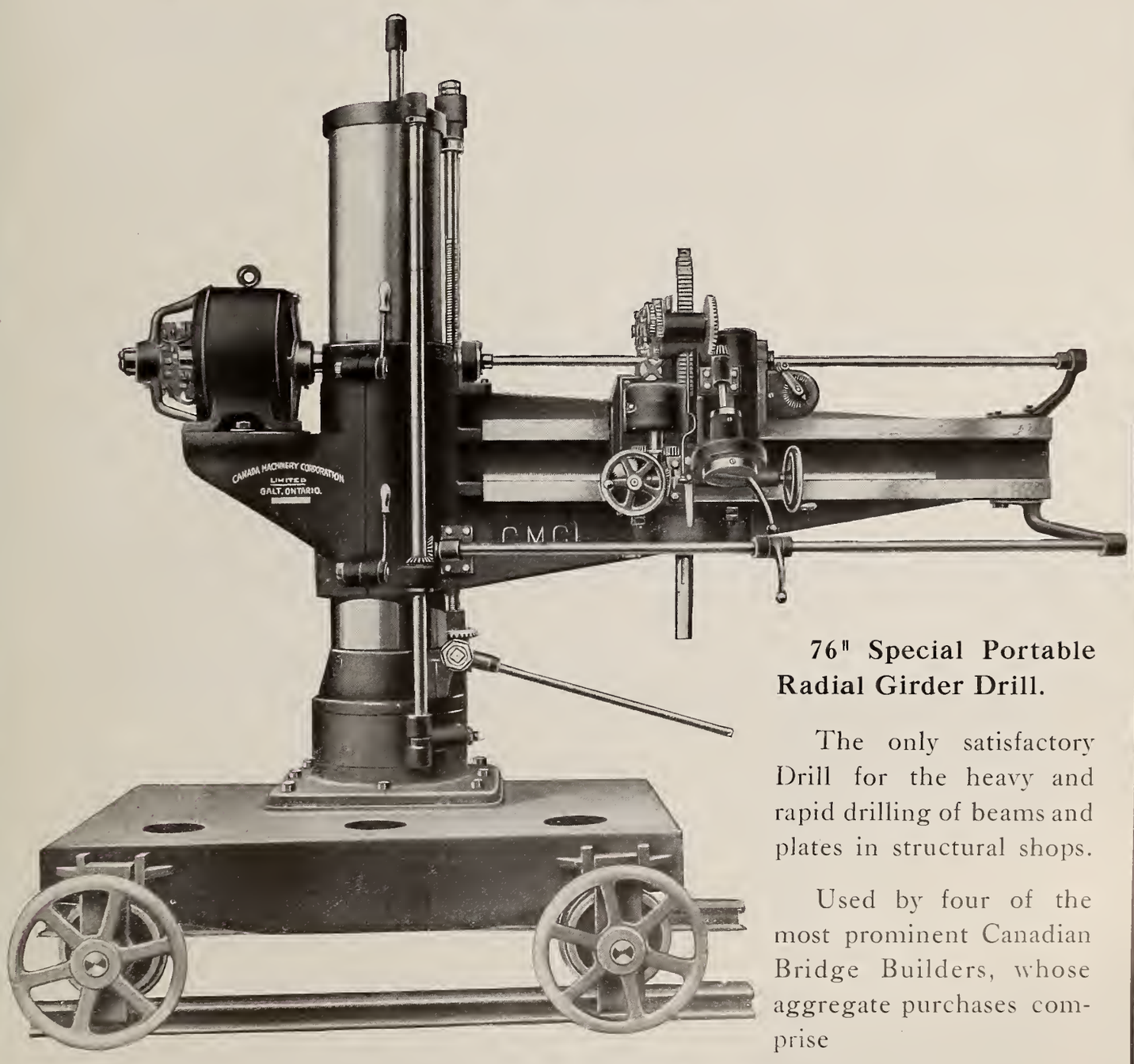
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The only satisfactory Drill for the heavy and rapid drilling of beams and plates in structural shops.

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CANADIAN Carbide made in Canada from high grade materials and by experienced workmen. We have all sizes ready for prompt shipment and *guarantee quality.*

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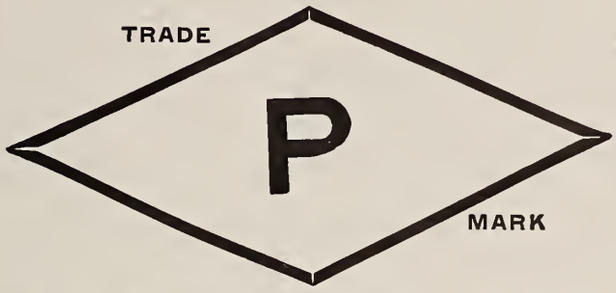
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represents the highest achievement in the manufacture of Babbitt.
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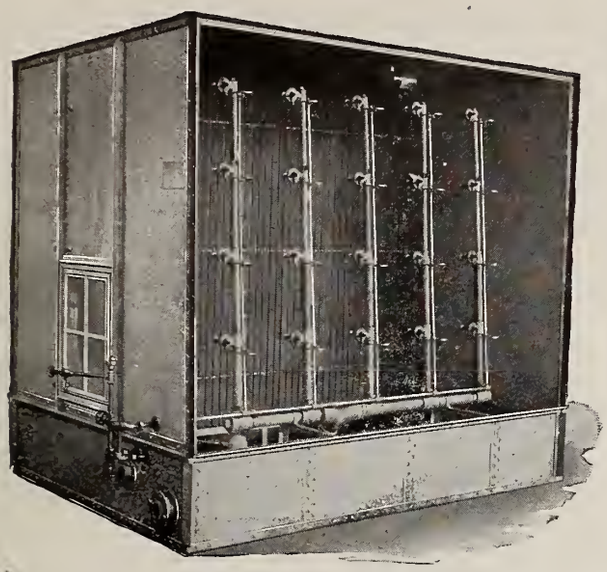
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Have Beaten All Previous Records

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Mixtures and Physical Tests are Controlled through our Chemical and Testing Laboratories

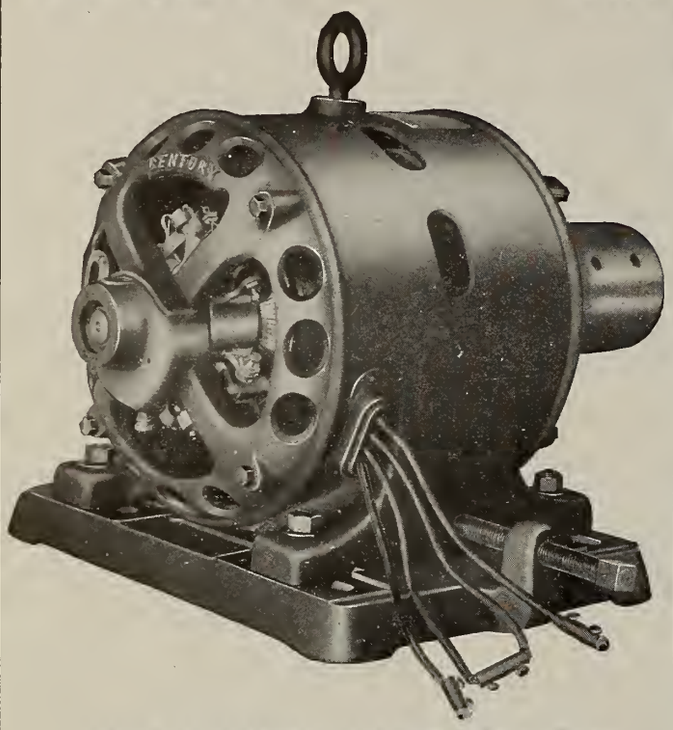
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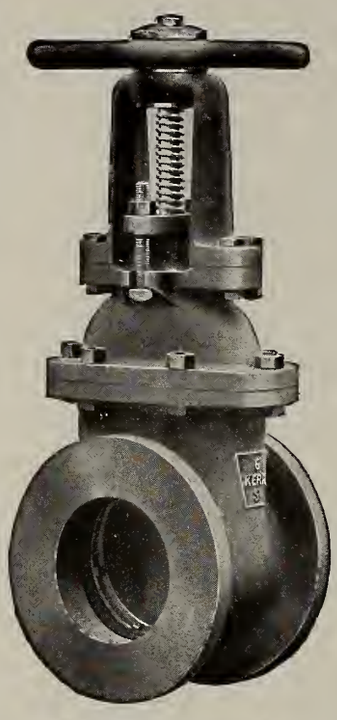
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BUTTERFIELD'S TAPPER TAPS

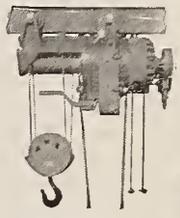
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Made in Canada by Crane Builders of over twenty years experience and in a New and Modern Crane Plant.



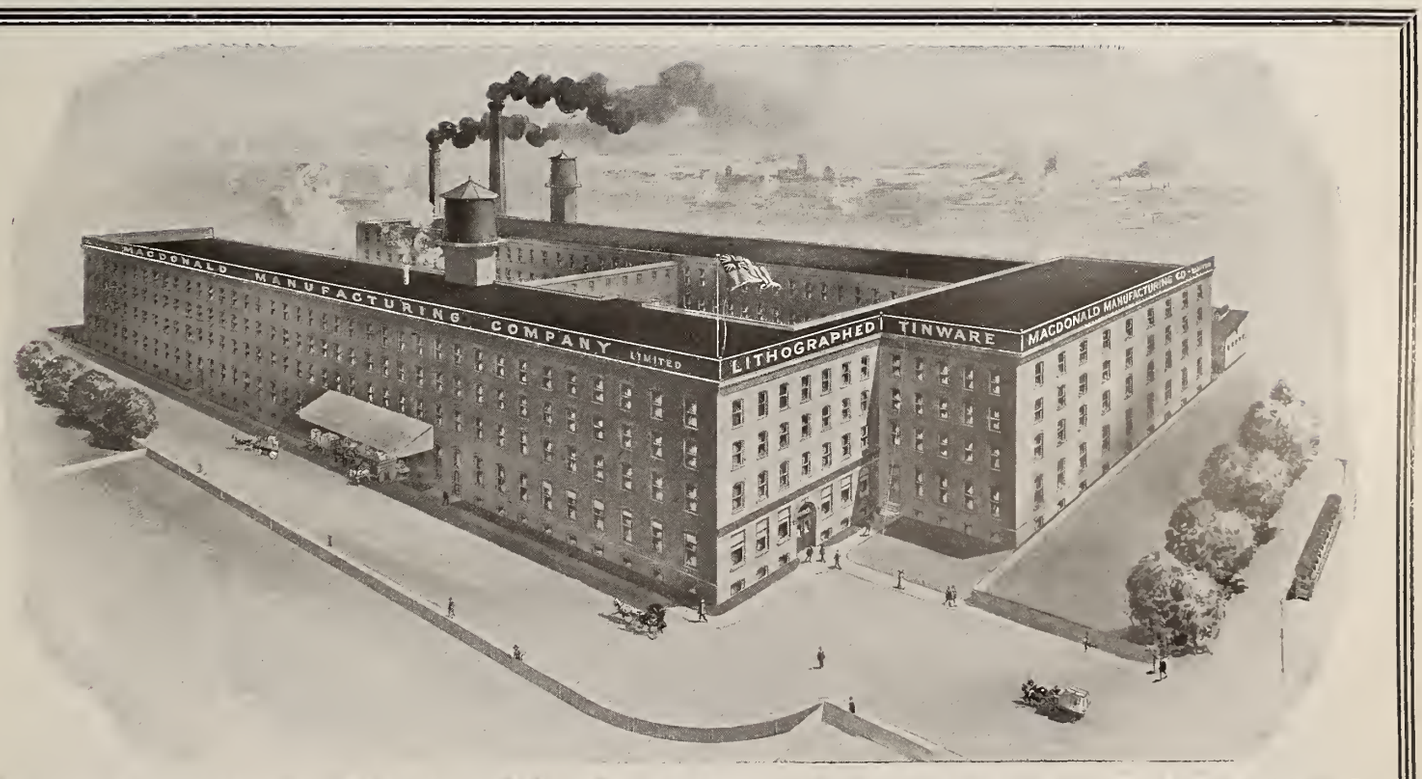


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We Specialize on Cans or Boxes required for Customer's Exclusive Use
Practically Nothing Else made in our Entire Plant
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PLAIN OR DECORATED TIN BOXES AND SIGNS

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"Truck Makers Exclusively"
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You have lots of valuable material, patterns, etc., within easy access of prowlers, and few factories there are that are burglar-proof: Two very good reasons, surely, why you should fence in your factory. Look at the

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shown in the picture—study it in detail. Even although there is a night watchman employed here, the *neat* and *sturdy* Standard Fence makes protection doubly secure. Let us know the extent of your grounds, and we'll give you an approximate figure on the cost of fencing them in to your entire satisfaction.

Whatever your fence needs may be, we can supply them at prices that will meet with your instant approval. Write for particulars.

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ALL REPORTS STRICTLY CONFIDENTIAL

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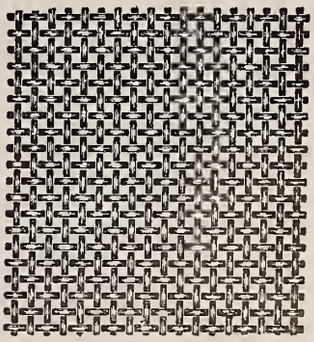
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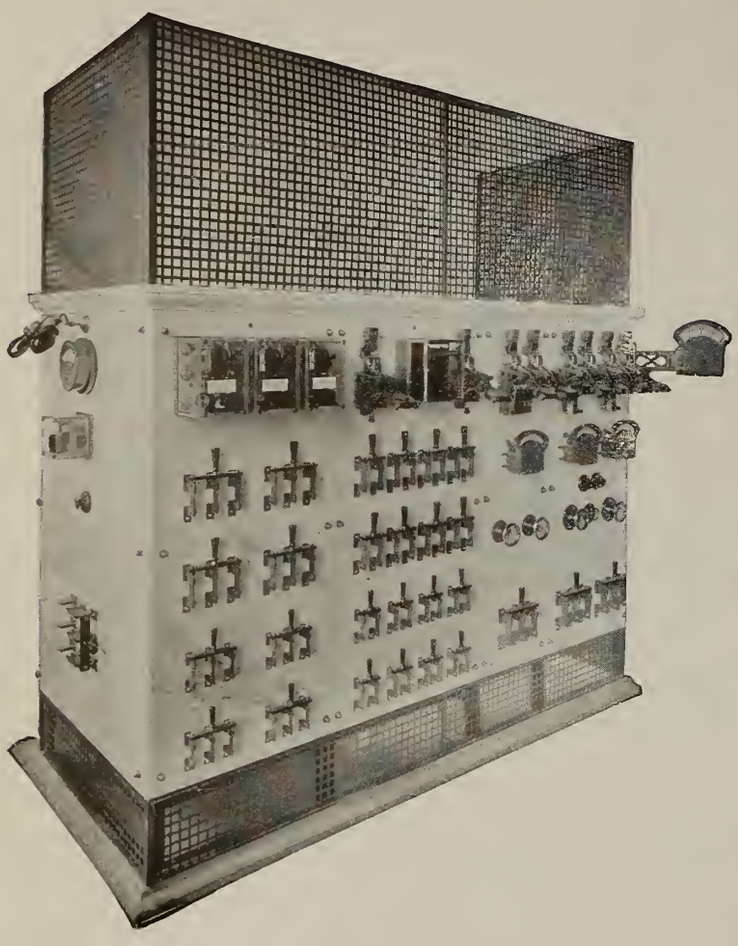
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We also manufacture:—

Bank and Office Grilles and Ornamental Iron Work in all finishes.

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When special equipment of this nature is required our engineers are at your service.

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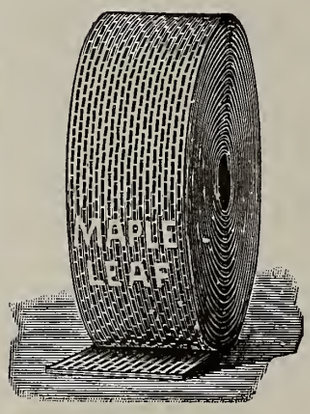
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The best on the market for TRANSMISSION OF POWER, CONVEYING, etc.

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Montreal Cotton Co. Operatives' Houses at Valleyfield, P.Q., roofed with ASBESTOSLATE

Where Building Costs Get First Consideration Keen Business Men Choose ASBESTOSLATE ROOFS

You may be sure the Montreal Cotton Co. did not choose Asbestoslate for the roofs of these operatives' cottages without abundant proof that it pays in the long run.

Though Asbestoslate costs a little more at first than wooden shingles, metal or prepared roofings, it really costs far less per year of service. While the latter steadily deteriorate and demand frequent repairs and all too quick renewal, ASBESTOSLATE simply gets tougher and more impervious with years of exposure as the cement in it hardens. Without paint or attention, an ASBESTOSLATE roof will last as long as the building stands. Besides it is handsome and absolutely fireproof.

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Gourlay-Angelus Player-Pianos



A GOURLAY-ANGELUS provides ANYONE with the ability to play ANY music artistically.

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One Toronto manufacturer tells of this pleasure in a Gourlay-Angelus as follows:—"I have always been glad I purchased the Gourlay-Angelus. The longer I have it the more I enjoy it and the more I use it."

Write for Catalogue and Prices

GOURLAY, WINTER & LEEMING,

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OPENS THIS DOOR—
EXPOSING THE LEVER—

THERE IS

No Key to Get Lost

The box is protected from malicious or mischievous persons, for the glass must be broken before an alarm can be sounded.

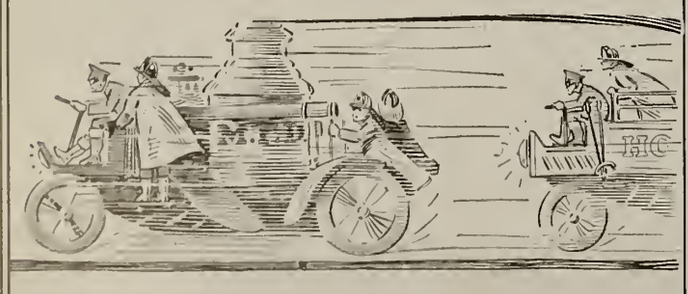
This box is a product of the factory that has made 99 per cent. of the fire alarm systems for the biggest cities on the continent. It is the latest design in factory fire alarms.

Our nearest house will be glad to send a man to help you select the Fire Alarm System best suited to your factory's requirements.

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CUT FASTER LAST LONGER
Than any other wheels on the market

Tell us the service you want performed and we will supply you with an abraser that will save you time, money and worry.

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Underwear Hosiery and Sweaters

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A Great Saving of Current and More Efficient Illumination

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Our Hastings Saw Mill Being Established 1865

We make a specialty of Timber Orders, and can cut up to 120 feet in length. We have been shipping Dredge Spuds 36 x 36 x 60 for years as well as long spars.

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Dey Cost Keeper for Getting Accurate Cost

We are the Original Manufacturers of All Time Recorders.

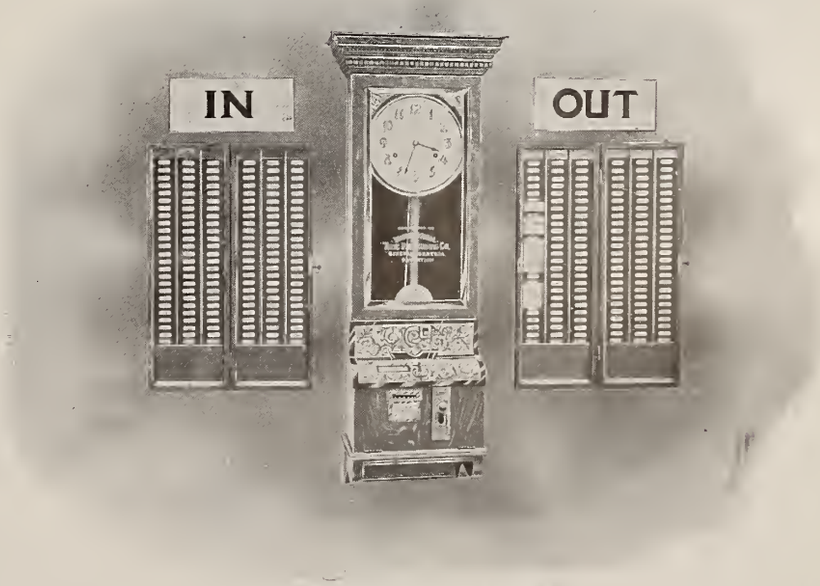
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Are made from special fibre stock, and are constructed so as to protect the goods from damage or breakage. At the same time saves 75 p.c. of weight of wooden cases.

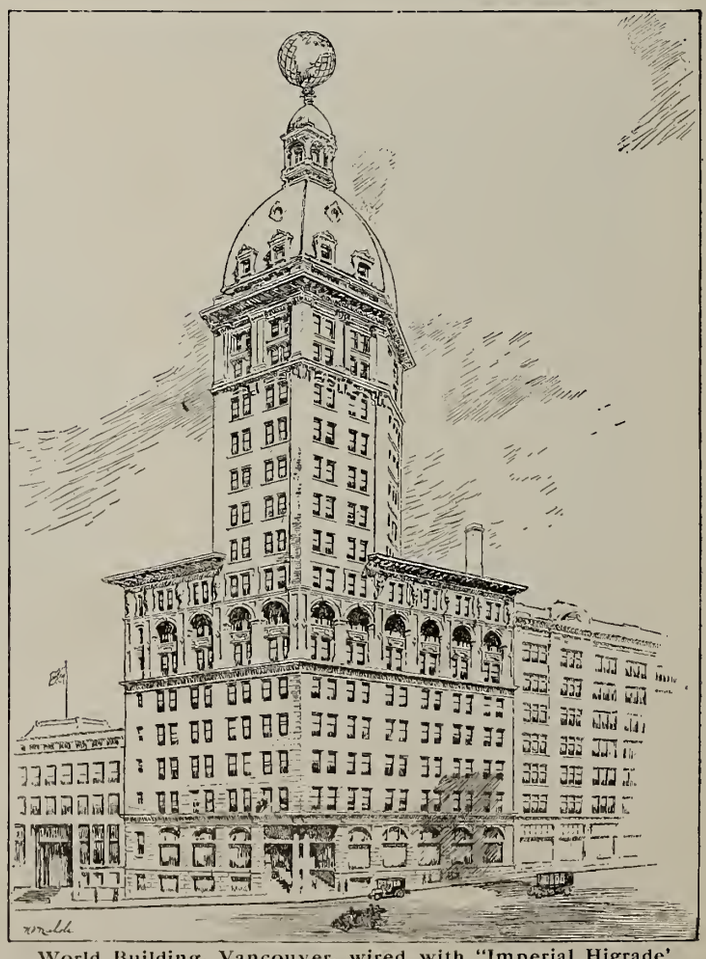
These boxes comply with the freight classification and are accepted at the same rate as goods packed in wooden boxes. Can be used for shipping by freight or express any goods in reasonable weight package.

Write for catalogue and sample. Give inside dimensions and weight of contents.

Martin Corrugated Paper & Box Co., Ltd.

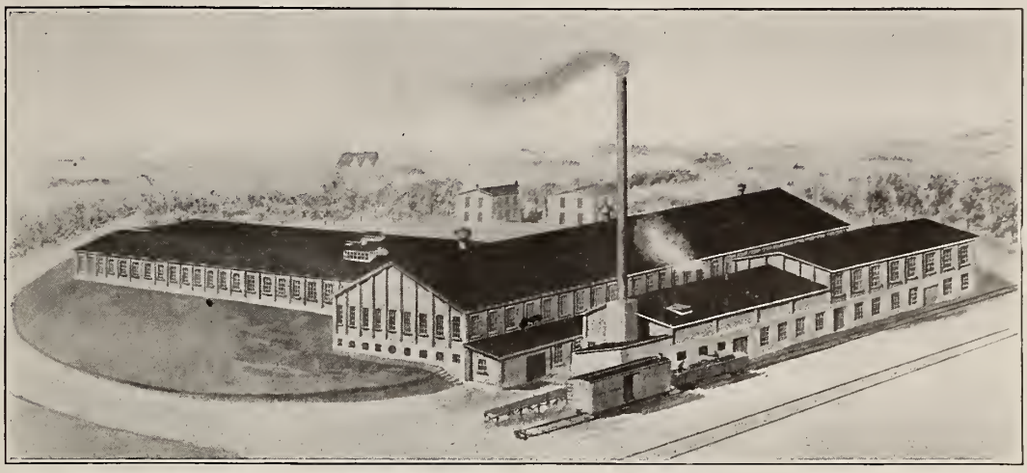
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LARGE VARIETY BUILDING PAPERS

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ENVELOPES TO MATCH

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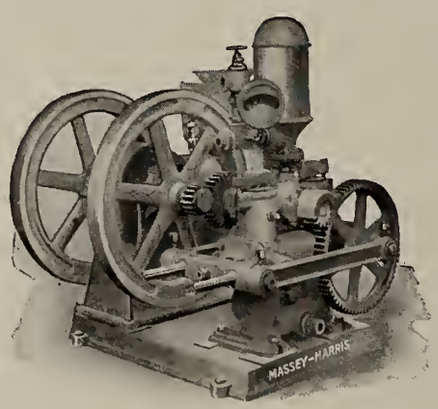
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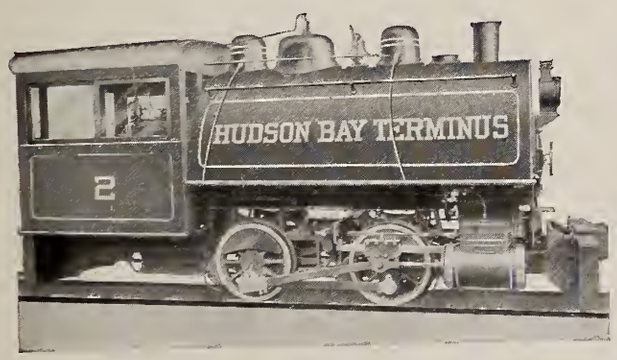
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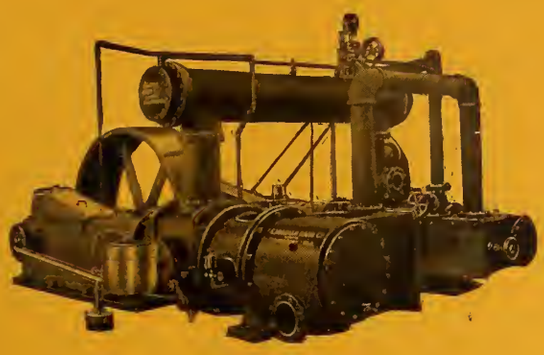
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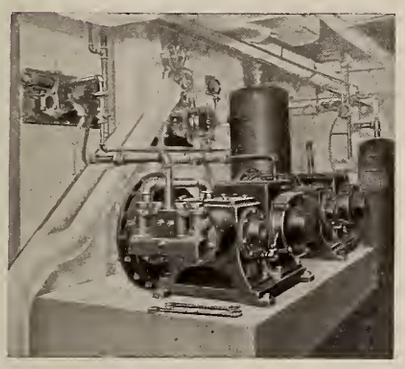
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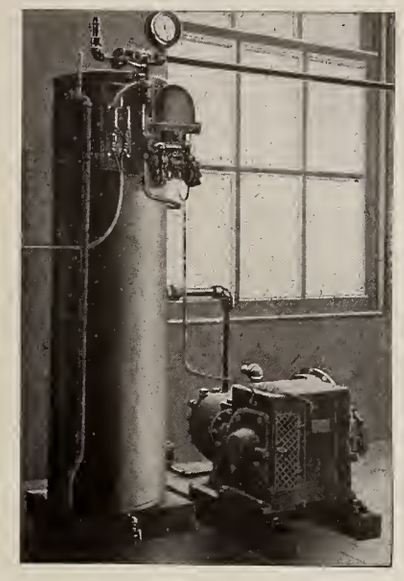
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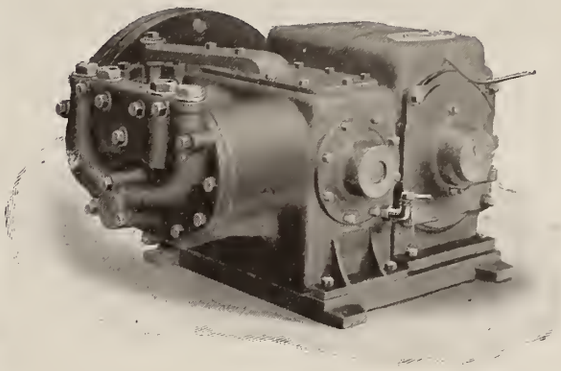
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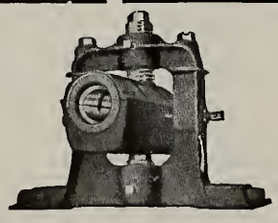
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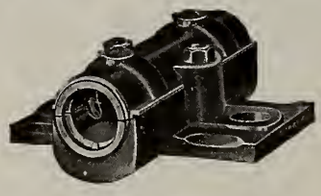
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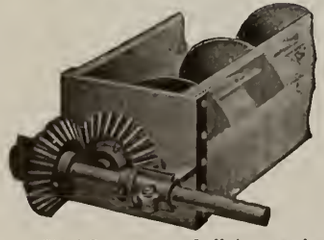
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The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

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Are Our Railways Sound?

HAVE we been unduly pessimistic of late in regard to our railways?

During the present commercial depression many men of prominence have hesitatingly questioned and, in some cases, have vigorously condemned, our railway policy. Briefly, this policy has been to build railroads as fast as we could get the necessary money and men.

Charges that we have squandered our borrowed money in building unnecessary railroads in the most expensive manner have been made persistently until a certain hostility to these railroads has colored the minds of taxpayers. To a certain extent these charges are well founded. It is now fairly well agreed that the stone bridge connecting Eastern and Western Canada did not need three costly spans; that part of the Eastern section of the Grand Trunk Pacific might have waited; that the Hudson Bay Railroad might have waited longer; and that there was considerable loss through mistakes, incompetence and overlapping during construction.

But, admitting these things, which, after all are of secondary importance, have we been unduly pessimistic over the two principal questions: first, have we built far beyond the needs of the country? and, secondly, have we mortgaged our future too heavily in payment?

In listening to statistics concerning railway mileage per capita we should remember that railway prosperity does not necessarily depend upon the number of citizens in a country. China has a great population but few railways, while Canada has a small population and many railways. But certain qualities in a population are very important. Between 1891 and 1911 the population of Canada increased by 49 per cent. Yet, during the same interval the number of passengers carried by our railways increased by 249 per cent., the number of tons of freight moved increased by 391 per cent., the gross earnings increased by 432 per cent. and the net earnings increased by 465 per cent.

Railways depend upon the productive and consuming capacity of the population of a country, of that population's power to originate freight and move it about, of that population's desire and ability to travel—in short, upon earnings. The following table shows the remarkable increase of railway traffic in Canada since 1891:

Year.	Passengers carried.	Freight tons moved.	Earnings.	Net earnings.
1891..	13,222,568	21,753,021	$48,192,099	$13,231,650
1911..	37,097,718	79,884,282	188,733,494	57,698,709
1913..	46,230,765	106,992,710	256,702,703	74,691,013

The above figures prove that, during the past twenty years, we have been a travelling, freight-moving, freight-receiving people; in other words, the sort of people who make railways pay. They also indicate that if these rates of increase continue, our present railway accommodation will soon be inadequate, for although three trunk lines should suffice us for many years, a network of new branch lines will be needed to serve the territories adjacent to the transcontinentals. Why, then, should we reincarnate that dead spirit of prophecy which doubted the ability of the C.P.R. to pay for its axle grease?

Is it likely that our railway expenditures will cripple us financially, when most of the money spent on railway construction and equipment ultimately finds its way into our own pockets in return for our farm produce, manufactured goods and labor? *The Financial Post* published a table recently showing that, in 1913, the total paid-up capital of the Canadian railways was $2,006,792,422, made up as follows: Share capital, $918,573,740; bonded debt,

$613,256,952; and government and municipal aid, $474,962,730. If we assume that the net earnings of Canadian railroads, in 1913, amounting to $74,691,013, were available for dividends, our roads, in that year, earned a dividend of 3.72 per cent. on their combined paid-up capitalization of $2,006,792,422; and if we deduct from that capitalization the government and municipal aid, our roads earned a divided of 4.87 per cent. on $1,531,830,692, which represents their total share capital and bonded debt.

If they can make so satisfactory a showing during their construction period can we not hope that they will improve it in the future when construction will be limited to branch lines and supplementary equipment?

Stability of government is one of the essentials for railway prosperity which we are liable to overlook. We enjoy such serenity under the British Empire that, just as a healthy man ignores disease, we ignore the revolutions and wars in other parts of the world which intimidate capital. But British and foreign investors realize our political security and regard it as an asset to our railroads.

Investors also recognize that we are getting our national transportation plant into operation. Instead of waiting until settlements have justified construction, our railways have usually preceded the pioneer, carried in goods and carried out produce. This policy increases mileage and runs up construction and equipment bills, but it opens up vast earning fields for the railroads. Moreover, it serves the country and robs pioneer life of those major hardships which are still part of the history of Western States settlement.

With the possible exception of the Hudson Bay road, what Canadian railway will be either superfluous or unprofitable a few years hence?

The Wealth Production of Industry.

THE MONETARY TIMES of Toronto publishes the following table, which shows the various sources of Canada's production last year:

Agriculture	$ 550,000,000
Industries	1,500,000,000
Forest products	70,000,000
Fisheries	34,000,000
Minerals	140,000,000
Animals and products	300,000,000
Total	$2,594,000,000

It is gratifying to learn that Canadian industries contributed 58 per cent. of the total. The accumulative power of manufacturing is remarkable. Values of the raw products from agriculture, the forests, the fisheries and the mines are vastly multiplied when they pass through the factories. The more highly specialized are the processes of manufacture the greater will be the value of the products. A log which comes from the forest has a certain export value. But this value is increased if it is sawn into lumber. If the lumber is made into fine furniture the original value may be multiplied by a hundred. This illustrates the folly of exporting products in or near their raw state. The nation which can carry the manufacturing of its products to the highest degrees of specialization will be as rich and powerful as the nation which sells its products unmanufactured will be poor and dependent.

There is an intensiveness of manufacturing which surpasses any intensiveness which can be applied to the land. Although the production of land can be greatly increased by intensive farming, the law of diminishing returns operates after a certain limit has been reached. But who can limit the possibilities of human effort and ingenuity when applied to a piece of wood or a lump of iron?

The $1,500,000,000 of wealth which industry contributed to our national wealth last year can be increased just in the proportion that capital and energy are given opportunity and protection.

Workmen's Compensation Act for British Columbia.

A WORKMEN'S COMPENSATION ACT will probably be introduced into the Legislature of British Columbia at its next session.

The principles underlying the compensation of workmen are approved by manufacturers, who are willing to support nearly any system which will free them from the uncertainty of litigation and transmit almost the entire sums paid direct to their workmen.

We fear, however, that there will be a tendency on the part of the British Columbia Legislature to copy the Ontario Act, and, if other provinces follow, the result may be that it will become the model Act of Canada.

Those who are at all familiar with the subject know that the Ontario Act is far from being a model act, and that many of its clauses must be amended before it will become a practical piece of legislation. The inconsistencies and contradictions, known now to only the few who have carefully studied the Act, will become painfully apparent to many when it goes into operation.

British Columbia and other provinces will benefit by waiting until practice modifies the Ontario Act before fastening a similar measure upon themselves.

Westinghouse Strike Ended.

THE strike at the Westinghouse Company, East Pittsburgh, was called off by the workmen on July 9th, and, while the day set for return to work was Monday, July 13th, a large number of the men reported on the Friday and Saturday preceding. The plant is now running full time.

The issue in the strike was the determination of the Westinghouse Company to maintain an open shop.

"The pay of skilful and productive Westinghouse employees shall not be regulated by the pay of the inefficient and less productive" was the position of the management.

The company determined to consider ability only in engaging, promoting or dismissing workmen.

tive grouping and operating agencies. Let farmers in outlying districts show their wisdom by intelligent marketing as well as better methods of production. Let us have more skill, more will. Sell more—buy less. Make things wear. A dollar saved is a dollar made."

Mr. Dunning replied in part as follows through the *Regina Leader*.

"I notice," said Mr. Dunning, "that Mr. Green is reported as having stated that while I may be capable of giving good advice to the Canadian Manufacturers Association, it is unfortunate for the country that they did not get their information from some practical farmer. Dwelling on this criticism of myself for a moment, I might say that if to grow rich by speculation in city property is one of the qualifications of a practical farmer, then I cannot qualify. If, on the other hand, twelve years spent in homesteading and farming and three years' service as vice-president of the Saskatchewan Grain Growers' Association are adequate qualifications, I might, perhaps, be considered practical. However, I am quite content to let the farmers of Saskatchewan decide whether my statement of conditions, as expressed in the address to the manufacturers, is correct, or Mr. Green's statement, which practically means that our agricultural industry is in a flourishing and prosperous condition.

* * *

"General opinion seems to be that the Manufacturers Association made a move which could only result in good when they invited a Western farmer to address them on agricultural problems, and the manufacturers themselves admitted that the facing of facts in connection with the economic position of Western agriculture is now urgently necessary. It is deplorable that a responsible man like Mr. Green should say in effect, 'I have gotten rich; so you fellows who are poor must be incapable or wasteful.' Western farmers have been trying for years to get Eastern Canadians fully to grasp the problems of the West, and now when a forward step has been taken, a man trusted by Saskatchewan farmers practically tells them that there is no problem, that they only need to work hard and save. Time will tell whether or not Mr. Green truly states the condition of the industry which he is supposed to represent."

We believe that Mr. Green would not have attacked Mr. Dunning if he had understood why he was asked to address the Montreal convention. The manufacturers were given to understand that the Western farmers had certain grievances against Eastern Canada and that some of these grievances were cherished against Eastern manufacturers. Knowing that most quarrels arise from misunderstandings rather than from design, the Canadian Manufacturers Association thought it would be advisable to hear what these grievances were from a Western man thoroughly familiar with agricultural conditions. Mr. Dunning was not the only Westerner who could have accomplished this task, but, as an ex-homesteader, ex-farmer, and representative of agriculture, he was well qualified to perform it.

Mr. Green thinks that, by emphasizing the troubles of Western farmers, Mr. Dunning disparaged the agricultural opportunities of the prairie provinces. We would remind Mr. Green that, when a lawyer appears in court, he does not dwell upon the benefits his client is receiving, but rather upon the disadvantages under which he suffers. Similarly, Mr. Dunning did not occupy the manufacturers' time by telling them about Western farmers' prosperity, assuming that this was cheerfully recognized by all and was not in dispute. He dealt with the grievances of Western farmers, with a view to securing the co-operation of Eastern manufacturers to remove these grievances.

Mr. Green's motive seems to be beyond reproach. He is jealous of the good name of the agricultural West. So is Mr. Dunning. But he is trying to remove its thorns as well as enjoying its roses.

Mr. Green's closing paragraphs, though fairly direct, contain some sentiments with which few, except those mentioned, will disagree. There is always a disgruntled minority in all classes which cannot be satisfied, and care should be taken that its grievances should be distinguished from those of the majority.

If Mr. Green will read a verbatim report of Mr. Dunning's speech, which we will be glad to supply, instead of colored versions published in some newspapers, we venture to say that not only will he find little with which to disagree, but also that he will realize how great a service has been done the West by the capable presentation of its

---

Steady Production from Our Mines.

LIGHTENING the gloom of the depression which is upon us comes a ray of optimism from the British Columbia mining industry, defined concisely in the following editorial from the *Daily Colonist*:

"Mr. Thomas Taylor, Minister of Public Works, has returned from the Interior with a very optimistic report as to the condition of the mining industry. His statements bear out what Sir Richard McBride told *Colonist* readers a year ago to expect. They endorse what Mr. Goodeve told us a few days ago. They corroborate the scores of reports made by private individuals. There is not in Kootenay anything bearing the faintest resemblance to a mining boom. What is happening is that a number of hard-headed business men are putting their money into mines and winning handsome profits. You cannot find a wildcat in the whole of Kootenay. It is all business so far as mining is concerned.

"This is certainly a very gratifying state of things. It not only means much for the present, but it means very much for the future. There was a time when even the most hopeful of us could not wholly banish doubts as to the permanency of the lode-mining industry, but that has now been demonstrated. The new conditions will make it easier to secure capital for *bona fide* mining propositions."

Canada's mines have stood her in good stead during the stringency. Cobalt shipments have been constant, and throughout the whole country mineral production has been steadily increasing. Last year our mines yielded $140,000,000. Our national eggs are not all in one basket.



Elevation Track Side of the New Canadian Pacific Railway Passenger Station, Vancouver, B.C.

FACTORY BUILDING IN CANADA

BY J. T. STIRRETT

IN spite of the commercial depression a considerable number of manufacturers in Canada are building new factories or extensions. Trade dullness, as a matter of fact, often stimulates building, because of the resulting possibility of securing material and labor at lower prices than in prosperous times. The writer recently sent out enquiries to all the important Boards of Trade and Industrial Bureaus in Canada and this article is compiled from the information received in reply. No general attempt has been made to secure material from those centres which did not accept the invitation to send it. Thus, the article is, in a measure, spontaneous, and, as might be expected, the majority of the active industrial centres of the Dominion are represented.

The results seem to indicate a decided faith in Canada's industrial future and it seems reasonable to suppose that the keen business minds authorizing these building operations rest their faith on substantial reasons.

Winnipeg's Fine Record.

The records from the building inspector's office at Winnipeg show that in the first five months of this year there has been a steady increase in the industrial development of the city. The total expenditures for new factories, extensions and warehouse buildings for the above period amount to $627,000, and in addition to these figures much new capital is going into industrial plants that will show when the year is completed. The factory expansion at Winnipeg has made considerable progress.

Among the latest industries located in Winnipeg, for which plans are being prepared, but for which as yet building permits have not been taken out, and are therefore not officially recognized by the city, are the Watkins Medical Company, which will expend $150,000 on its Higgins Avenue site, in putting up a plant; the Coca-Cola plans call for a building to cost $250,000; and the Sunset Bag Company is to build a plant which will aggregate $100,000.

This makes a total in industrial and wholesale expansion in building alone for the first half of 1914 of over $1,225,000; and it must be remembered that the building season in Winnipeg is practically at its commencement.

The 1911 report of the Industrial Bureau showed that 44 new industries had been located in Winnipeg during the year. In 1912, 63 new factories were started in Winnipeg. In 1913, 26 new companies built plants and commenced operations in Winnipeg. Besides this 109 other industrial concerns incorporated in 1913 with headquarters in Winnipeg. These

newly incorporated industrial concerns have a total authorized capital of $13,337,000, and in addition, ten of the older established corporations extended their working capital by an increased authorization of stock to the value of $3,160,000. In the year 1900 the industrial output of Winnipeg was $8,606,248. In 1905 it was $18,983,248. In 1910 it was $39,400,608, and in 1913 fully $50,000,000. To-day there are over four hundred factories in Winnipeg, employing 20,000 hands, with over $50,000,000 invested.

Progress of Medicine Hat.

Two large flour milling concerns in Medicine Hat, Alta., are now in the initial stages of an expenditure for new and enlarged construction that will run well up above half a million dollars. The largest of these is the Maple Leaf Flour Milling Co., which has already begun its excavation for the construction of its plant. When completed the plant will have a capacity of 3,000 barrels of flour each twenty-four hours. The initial capacity will be 1,500 barrels daily, but with room enough to add the requisite machinery to bring it up to double that amount. The entire plant will be finished in time to begin handling part of the large grain crop which now seems to be practically assured for Western Canada for 1914.

On June 1st the Lake of the Woods Milling Co. took over by purchase, at a price stated to be $300,000, the plant, business, good-will and country elevators of the Medicine Hat Milling Co. The capacity of the latter was 1,000 barrels daily. Already active construction is under way which will provide for doubling its daily capacity and will also increase the elevator capacity at least threefold.

The Ogilvie Flour Mills Co., after expending in excess of a million dollars on its modern, up-to-date factory in Medicine Hat, having a capacity of 2,000 barrels daily, began turning out its product on the 24th day of July, 1913. With its half-million bushel elevator, supplemented by seventeen country elevators located at logical points within striking distance of Medicine Hat, it has kept busy for the last year, and has also enjoyed a steadily growing Japanese and Chinese trade.

However, to provide for the increased business that it is anticipated will develop here, the company has just purchased six more elevators and arranged for the construction of four new ones, making a total of twenty-seven country elevators for this concern, and giving it a total elevator capacity of approximately 1,300,000 bushels of grain. Together with the elevators now being constructed or enlarged here, within a few months Medicine Hat mills will have an elevator capacity of about 2,000,000 bushels.

Other Factory Construction.

However, the factory construction is not confined in Medicine Hat to flour mills. The J. H. Tabor Candy Co., Ltd., now has under construction a substantial two-story and basement structure of brick and tile, being 50 x 100 feet, and located in the main industrial section of Medicine Hat. This concern expects to have the factory completed and equipped with modern machinery intended for that purpose, and be in active operation some time in September next. L. Carey Wright has begun work on the factory for his concern, to be known as the Medicine Hat Radiator Co., the main building of which will be 80 x 290 feet, the brickwork being nearly all completed. Mr. Wright expects this factory to cost from $75,000 to $100,000 when ready for operation in the fall, and states that the outlook for his product is all that could be desired. Last fall the Saskatchewan Bridge & Iron Co. began construction on its $100,000 industry, while a three-mile spur line was being graded and railed to the site. This work has now been completed, and the finances arranged and work will shortly be resumed on the completion of the buildings proper. Active manufacturing is expected to be going on at this industry within three months. The Rosery Flower Co., which already has an investment of about $70,000 in a most complete greenhouse plant, is adding an extension costing $10,000, and will have some three acres under glass. The Dominion Sanitary Fountain Co., which put in its concrete footings last fall for a 50 x 100-foot factory building, is now resuming work on the same, and when it is completed and in operation will represent an expenditure of $15,000. The Canada Cement Co., which last year started work on a 4,000 barrel plant, to cost, when completed, about $2,500,000, is expected to resume its construction programme shortly. Already it is estimated that something over a million dollars has been expended on this industry, and when completed and in operation it should be one of the large employers of labor here. The Alberta Clay Products Co. has recently spent several thousand dollars in improvements to this plant and now has orders for sewer pipe on hand that will keep it busy for months in advance. Further enlargements and extensions are also being considered by the company, which it is expected will be undertaken this year. This company now has an investment of $700,000.



The Industrial Bureau, Winnipeg, Man.



The New Ogilvie Mill in Medicine Hat, Alta.

In Regina the Saskatchewan Co-operative Elevator Company is calling for tenders for a substantial building at the corner of Eleventh Avenue and Smith Street, the estimated cost of which is $75,000. The erection of this building will be completed during the summer. It is interesting to note the success which has attended the efforts of this company, which was formed along the lines suggested by the Saskatchewan Grain Growers' Association, and is in reality a farmers' organization backed by the Provincial Government.

A broom factory with a capacity of 12,000 brooms per month will in all probability be erected by the Western Broom Company. The agreement has been drawn up between the company and the city, and has been recommended for acceptance by the finance committee.

A brick plant with a capacity of 40,000 bricks per day will probably be erected at Regina in the near future if experiments being carried out are successful.

During the past twelve months a number of factories have commenced operations in Calgary, including the Canada Malting Company, Mountain Spring Brewing Company, Fletcher Elevator Company for the handling and cleaning of grain, the Rockland Marmalade Company, Pioneer Tractor Company, the American Paper Box Company and many other smaller plants.

In Toronto the principal factories under construction are those of the National Cash Register Company, the Ford Motor Company, Roden Brothers and W. E. Dillon. The Canada Wire and Cable Company are building a million-dollar plant at Leaside, just beyond the north boundary of Toronto.

Proctor & Gamble Company, multi-millionaire soap and perfume manufacturers, who operate five large plants in the United States, with headquarters in Cincinnati, Ohio, have decided to erect a plant in Hamilton, costing a quarter of a million dollars and employing 500 hands to start. This concern manufactures Ivory Soap, Crisco, a substitute for lard, cotton seed oil, glycerine and many other food products.

Windsor is Booming.

In Windsor and vicinity there has been continued activity, both in building and in the establishment of new factories. Maul & Riggs erected an artificial stone plant at a cost of $5,000. The Central Ice & Storage Co. has just completed a large building in the factory district, the cost being about $75,000. The Ideal Concrete Machinery Co. has started on a branch plant in Windsor. The head office of this firm is in Cincinnati, Ohio. The Canadian Zagelmeyer Co. has completed two factory buildings. This is a branch of the Zagelmeyer Machinery Co. in Bay City, Mich. The Swedish Crucible Steel Co. recently completed a large plant for castings. A grey iron foundry will be started in connection. This is a branch of the Detroit firm of the same name.

Fort William's New Plants.

An industry that is well adapted to Fort William is that of the Mount McKay Products, Ltd., manufacturers of pressed and common brick and clay products. The plant is situated at the foot of a mountain where shale is obtained by gravity. The company have recently been reorganized under a new charter, with a capitalization of $500,000. Four new brick kilns are in course of construction. Bordering on the eastern



One of Alberta's Newest Industries—the Plant of the Alberta Clay Products, Limited, Medicine Hat, Alta.

limits of the city and within a stone's throw of the McKellar Bedding factory, the Conley Frog and Switch Company have commenced the construction of what is to be one of the finest manufacturing plants at the head of the Great Lakes.

Mr. E. H. Baumgarten, one of Fort William's prominent business men, has resigned his position as head of the City Cartage Company to become the local manager of the Conley Frog and Switch Company. A large staff of men is employed on the construction of the new plant. A spur track has been completed to the site, and building material is being unloaded.

Great Plants for Montreal.

Armstrong, Whitworth Company, Limited, are erecting a steel and concrete at Longueuil, opposite Montreal. It will cover 60,000 square feet of land and is divided into six bays, utilized as follows: Storage, melting, steel foundry, hammer department, rolling mill and tempering departments. In addition to the above there is a large machine shop which in the early autumn will commence operations on the manufacture of twist drills, shear blades, milling cutters and general small tools. The firm will also manufacture for the Canadian market the highest grade crucible steels, from which all their miscellaneous shop tools will be made.

The Canadian Vickers, Ltd., and the Northern Electric Co., Ltd., are also building huge plants, and the Ford Motor Company has recently awarded contracts for a seven hundred thousand dollar factory.

Sherbrooke in the Procession.

The J. H. Hamilton Shoe Co., newly incorporated, is building a factory to cost about $25,000 in Sherbrooke, Que. They expect to pay $40,000 a year, at least, in wages. The Sherbrooke Machinery Co. is building an extension to its plant here. The plans provide for an expenditure of about $25,000 and the company will employ about fifty new hands.

The three American industries which since last fall have been doing work in Sherbrooke, Que., preparatory to operations in Canada, have now settled down to real production. The Canadian Connecticut Cotton Mills, Ltd., specialize in the manufacture of cotton tire duck. It is the only one of its kind in Canada. They have started out with eighty-five hands, which number they will increase as quickly as they can educate the labor. The total investment of this company in Sherbrooke represents half a million dollars. The Panther Rubber Co. is a branch of the firm in Stoughton, Mass. Mr. Chas. A. Joslin is the Sherbrooke manager. They have just started, and orders are daily increasing; they are already considering expanding. At present the output is about twenty gross pairs of rubber heels per day, the work of about thirty employees. Mr. Berenstein, the president, lately paid a high tribute to the adaptability and industry of French-Canadian labor. The Whiting Davis & Co. is a branch of the firm of the same name in Plainville, Mass. It controls the patent on the only machinery in America for the manufacture of wire mesh for bags and purses. This firm has had remarkable success in the United States, and it has made a good start in Sherbrooke.

New Brunswick's Industrial Activity.

In St. John, N.B., the Atlantic Sugar Refinery Company have their $2,500,000 plant completed so far as the building itself is concerned. The machinery is now being installed. It will probably be three months before the company can begin manufacturing. They expect to turn out 2,000 barrels of sugar per day and will give employment to 400 men. The McAvity Company expect very soon to enter upon the construction of their brass and iron foundry. The Ford Automobile Works have secured a factory site and buildings at

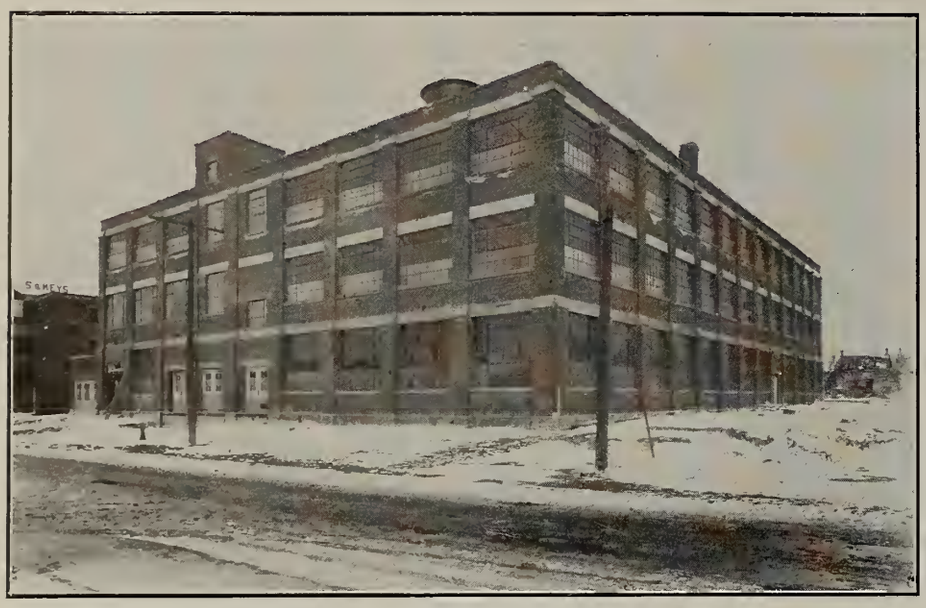


W. E. Dillon Sheet Metal Works just completed in Toronto

Coldbrook, and with a capital of $140,000 have begun to build. The Canada Nail & Wire Company have just leased from the city a site on the western side of the harbor for the erection of a horseshoe nail plant. The company, under their lease, must expend $10,000 in new buildings within six months and must employ at least forty men. The Christie Wood Working Company, whose plant was recently destroyed by fire, have got some of their machines at work again, and will probably rebuild their works. The Simms Brush Company have just completed the erection of a $350,000 plant. A Boston fertilizer company has announced its intention of establishing a plant at St. John in the near future for the manufacture of plaster products. The Oil Motor Manufacturing Company, the White Vacuum Sweeper Company and the International Harvester Company have just completed the establishment of works.



Interior of the Foundry of the Manitoba Bridge and Iron Works, Winnipeg, Man.



New Factory of Roden Brothers, Toronto

In the Province.

Outside of St. John a great deal of industrial progress is being made. At St. Stephen, a factory has recently been erected for the manufacture of ladies' shoes. At St. Andrews the Canadian Pacific Railway Company have begun the reconstruction of the Algonquin Hotel. The new building will be of concrete and will be much larger than the old one. The contract for the interior wood finishing has been awarded to Murray & Gregory, St. John. The approximate cost of the new hotel will be $250,000.

At Minto extensive improvements and additions are being made to the Minto coal and railway plant. Bathurst is having an extensive addition made to its sulphite milling plant. At Millerton machinery is being installed for a news print manufacturing enterprise.

Progress in Nova Scotia.

Industries enlarging at the present time are the Acadia Sugar Refinery, which is building a very large sugar refinery at Woodside, Halifax county, and the Carritte Patterson Co., which is building a paper mill at Fairview, Halifax county, just outside the city of Halifax.

With regard to new factories it is understood that the McKay Bros., previously associated with the N. S. Motor Carriage Co. at Amherst and Kentville, have withdrawn from that business and propose erecting a carriage factory at Halifax and starting a business capitalized at about a hundred thousand dollars. Their operations will include motor repairs.

A new peg and clothes pin factory was recently erected at Stewiacke by J. Lewis & Sons. The factory at Lewiston, Halifax County, was lately destroyed by fire The Lewiston factory, however, is now being rebuilt, and will be devoted exclusively to the manufacture of clothes pins. These two factories will employ about 400 men.

Probably the largest new factory construction in Nova Scotia this year is that of the Standard Clay Products, Ltd., at New Glasgow. This plant is situated at the extreme south end of the city, where the company have a magnificent bed of clay peculiarly adapted for their requirements. The plant this company have now under construction will be one of the most modern of its kind in Canada, and when completed will give an additional output of the company's products of ten cars per day and a total production of twenty cars of sewer pipe and clay products daily.

When this new factory is completed the company will have two separate and distinct units of a daily capacity of ten cars each.

Other buildings for manufacturing purposes include a modern machine shop for Mr. P. M. Fraser, butter and cheese factory for the Pictou County Dairy Co at Stellarton, and several extensions to the existing industries.

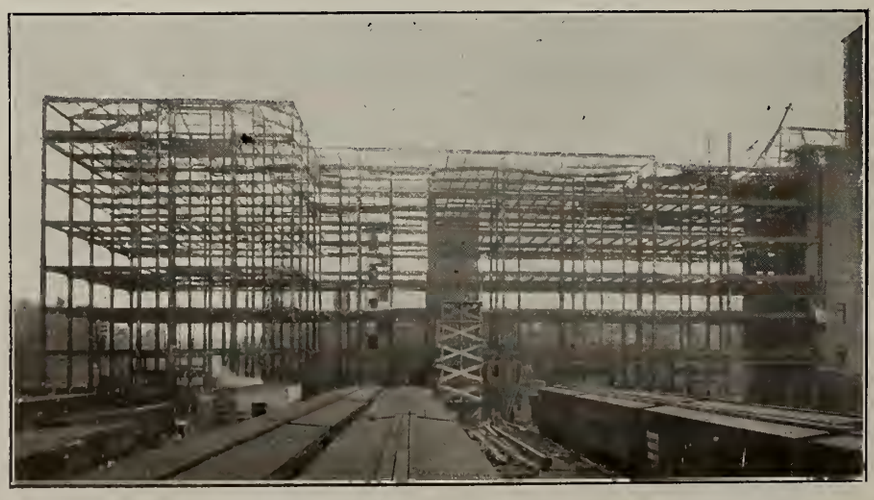
SLIGHT DECREASE IN TRADE DISPUTES DURING JUNE.

The number of trade disputes reported to the Department of Labor during June was nine, one less than for the previous month, and two less than the corresponding month of the previous year. The total number of disputes in existence at the end of the month was twenty-two, as compared with fifteen during May. The largest disputes of the month were those of carpenters at Montreal, in which 1,000 employees were concerned, carpenters at London affecting some 200 men, and miners at Nordegg, Alta., to the number of 300 directly and 600 indirectly.

GENERAL PRICE LEVEL UNCHANGED.

The Department of Labor's index number of Wholesale Prices stood at 136.2 for June, as compared with 136.2 in May and 136.4 in June, 1913. Advances in oats, barley, corn, flaxseed, cattle, beef, lamb, dairy products, sugar, glucose, wool, cotton, hides and tallow, lead, and anthracite coal, were offset by declines in wheat, hogs, iron, brass, tin, silver, spruce, miscellaneous building materials, furs and raw rubber.

In Retail Prices the features of the month were a general advance in potatoes and the continued decline in butter. Several declines in mutton, lard and fish occurred, but eggs were higher in many localities and sugar began to advance.



The huge building of the Dominion Express Company now being built in Toronto



National Cash Register's New Factory, Toronto

CANADIAN STANDARD FOR BOILER INSPECTION.

Rules of Various Provinces will be Consolidated.

As a result of the Conference on Uniform Regulations for the Construction and Inspection of Boilers, held in the Parliament Buildings, Toronto, from June 15th until July 2nd, Canada will probably have a national standard for the guidance of those who construct and operate boilers. The deliberations and final decision of this conference will be of great importance to the manufacturers of Canada, to all of whom new and amended regulations governing the boilers in their plants will be of interest.

The advantages of securing a Dominion standard instead of the various existing provincial standards are obvious, provided care is taken to safeguard the manufacturers from unnecessary annoyance and expense. The lack of a common standard has resulted in a handicap to boiler makers, who have to manufacture different products to comply with the several provincial standards.

Mr. R. P. Fairbairn, Deputy Minister of Public Works for Ontario, occupied the chair at the conference, which included the following representatives: British Columbia, Mr. John Peck, New Westminster; Saskatchewan, Mr. R. N. Blackburn, Regina; Quebec, Mr. P. J. Joblin; Nova Scotia, Mr. W. G. Matheson; Ontario, Mr. D. M. Medcalf, Toronto.

The Ontario regulations were taken as the basis for amendments and additions, to be included under the following headings: General, Registration of Design, Design, Material, Workmanship, Fittings and Inspection.

The code proposed by the conference will be considered by the various Provincial departments concerned, and will then become part of the laws of Canada.

It is stated that the conference strove to approximate to the British Board of Trade regulations, and that this object has been fairly well accomplished in so far as they are applicable to conditions in Canada.

As the law of British Columbia requires that manufacturers shall be given one year's notice of proposed changes, the national standard cannot go into effect for at least a year. In the meantime the existing provincial regulations will remain undisturbed.

The new national regulations will be submitted to the Engine and Boiler Section of the Canadian Manufacturers Association shortly, and any objections made on behalf of the manufacturers will receive due consideration.

The compilation of the new Canadian standard is under the supervision of Mr. D. M. Medcalf, Chief Boiler Inspector of Ontario, and his capable staff, who are making good progress with the immense task which they have undertaken.

PULP MANUFACTURING IN CANADA.

Statistics of the Industry for 1913.

During the calendar year 1913 Canadian pulp-mills consumed 1,109,034 cords of pulpwood valued at $7,243,368; during the same year there was exported to the United States an almost equal quantity of unmanufactured pulpwood which was valued at $7,070,571. This quantity of unmanufactured wood was sufficient to have supplied 60 mills of the average size operating in Canada in 1913. It would have made 1,035,030 tons of ground-wood pulp, or 517,515 tons of chemical fibre. Ground-wood pulp is worth at least $14.00 a ton, which would give $14,490,420 for the value of the pulp that could have been made from this wood by this process. Chemical fibre is worth at least $38,00 a ton, which would have brought the value up to $19,665,570. In reality only $7,070,570 was realized by the sale of this material. The pulp industry lost the profit that could have been made in manufacturing this wood into pulp, and the country as a whole lost the value represented by the cost of manufacture in the form of wages, etc.

Laws forbidding the export of raw pulpwood cut from Crown lands in the different provinces have tended to reduce the proportion of unmanufactured pulpwood exported, although up to 1913 over half of the pulpwood in Canada was exported in this form.

The manufacture of pulp in Canada in 1913 showed an increase of over twenty-eight per cent. over that of 1912, increases taking place in every province but Nova Scotia. Over seventy per cent. of the pulp produced is ground-wood, or mechanical, pulp, but the proportion of chemical fibre is increasing each year.

The increased manufacture of heavy Kraft wrapping papers has caused a demand for pulp made by the sulphate process, and the manufacture of this particular kind of chemical fibre has increased considerably in the last two years. The increase in the home manufacture of all classes of papers is shown by the decreases in the exports of pulp and the increases in the imports of chemical fibre from other countries.

Catalogues and Bulletins.

Herbert Morris Crane & Hoist Co.—Overhead travelling crane.
Jeffrey Manufacturing Co.—Arcwall mining machine.

GETTING RID OF THE SMOKE FROM THE FACTORY CHIMNEY

BY JAMES H. COLLINS

(Published by Special Arrangement with the Saturday Evening Post)

THE business world has now set seriously to work to eliminate by better management a number of unpleasant things connected with its affairs that—only yesterday—were considered unpreventable. Industrial accidents make up the largest item, and the next largest and most expensive seems to be smoke.

Many years ago a few æsthetic critics raised objections to the smoke from the factory chimney because it was not beautiful, and the very idea was new to the business world, which was astonished and could only retort that smoke from the factory chimney meant prosperity—more wages and profits; more goods and comfort for everybody. Smoke from the factory chimney was really a form of human happiness—and there could not be too much of it. In the United States a great national election was won on the platform that abundant black smoke should pour from all factory chimneys.

By and by the opponents of smoke found a more practical objection—that it was immensely expensive. Some startling facts were collected. Smoke-measuring devices were made and the fall of soot was reduced to figures.

In London it was found that about six hundred and fifty tons of soot fell every year on each square mile of the city, doing damage estimated at twenty-six million dollars a year, with a fuel waste of a million more. And that was only an everyday matter—for a London fog, which is only smoke out of the higher regions dropped down into the city by atmospheric conditions, could cost as much as a million dollars a day in delay and damage.

In Pittsburgh careful estimates indicated a yearly loss of ten million dollars, chiefly in damage to clothes and buildings, cost of washing, painting, papering, replacing of corroded metal, damage to merchandise, artificial lighting, and the like.

In Chicago the smudge bill was figured at forty million dollars a year; in Cincinnati at one hundred dollars for each family—and so on.

Numbers for Smoke Clouds.

Finally Uncle Sam's experts made a national estimate, placing the smoke loss by damage and waste at a round half billion dollars yearly—or seventeen dollars for every man, woman and child in all our cities and towns.

When ideas have any vitality at all they grow. By this time the business world itself admitted that smoke was not beautiful—except in a symbolic way—and the bill of costs was not disputed.

"What are you going to do about it?" asked Business. "How are we going to run our plants without making smoke?"

The answer was, smoke laws, smoke inspectors, smoke fines, smoke preventers, and other measures designed to cut down smoke production. Much was accomplished. Big industrial plants partly cured the smoke evil by patent stokers or better methods of firing boilers; but it was only improvement, not elimination.

Hundreds of little plants continued to make smoke in the small quantities that went to produce the great aggregate. Household chimneys continued their business at the same old stand; and the extent to which they are responsible for the smoke evil is shown very clearly in London, where it is estimated that more than half the coal used is burned in household grates—smoke has been an issue in London for five hundred years at least.

The inspector could not catch such offenders; and there were other smokemakers who, though anxious to reduce their contribution, had to face great difficulties—railroad locomotives furnish a large share of a city's smoke, for instance, yet could not be fitted with mechanical stokers or fired to eliminate smoke to the degree possible in a big industrial power plant.

Worse yet, it was found that the smoky chimney did not cause so much damage as the one apparently smokeless. Exact tests were devised by which the inspector, looking at smoke through an instrument, could give it a figure rating as number-one smoke or number-three smoke—or whatever it might be. But the chimney producing dense number-three smoke for fifteen minutes, calling out the inspector and bringing down a fine, was found to cause far less damage from soot and cinders than the innocent-looking stack producing a light number-two smoke all day; for, though the latter was conforming to the law, its daily output of soot might be enormous.

Smoke Washed but not Ironed.

In other words, when smoke was taken up seriously it was found to be as many-sided as other modern problems; but to-day the whole business world has its attention directed toward smokeless production, and from several different directions the real article seems actually to be coming.

One way of dealing with smoke that yields excellent results is turning round the old proverb and frankly recognizing that where there is fire there will always be some smoke. This point of view leads the engineer to stop trying for smokeless combustion and see whether something cannot be done with smoke after it has been made.

There are the smokewashers, by which smoke from an industrial plant is forced through water spray and cleansed of its solid matter. About one per cent. of the coal burned under boilers with the best equipment of automatic stokers will pass out of the chimney as soot and tiny cinders. To the average citizen's eye that chimney looks clean, because there is little of the colored cloud which he regards as smoke; but with a plant burning a couple of thousand tons of coal daily, located in the heart of a city, there will be a daily deposit of from ten to twenty tons of soot and cinders constantly raining down on the neighborhood and causing complaint.

The smokewasher removes all this objectionable stuff; and, though it may be costly to a corporation if the quantities of water necessary must be purchased, it is certainly economical to the community. And there is a direct advantage to the company that warrants the expenditure; for a large electrical corporation in the East considers the washing of its smoke one of the finest forms of peacemaking between the public and itself.

This kind of smoke treatment naturally leads to attempts to do something useful with the washings; for even in a small plant installed at a railroad roundhouse to wash the smoke from a hundred locomotives there is half a ton of washings

weekly, while a big power plant will have ten or fifteen tons daily. Chemically these washings are good fuel, for they contain more than eighty per cent. carbon—are really fine coke dust.

Mechanically, however, it is not easy to utilize them, because the fine fluffy residue fed to boiler fires would simply fly up the chimney again.

As it contains lampblack and iron oxide, some experts think it might be used for paintmaking; but in the end probably it will be pressed into briquettes by some economical process and used for fuel.

Smokewashing for the sake of cleanliness grew out of modern methods of utilizing gas from coke ovens and blast furnaces in the iron business. Once this gas was allowed to go up the chimney as smoke; but now, by elaborate devices for cleansing it from dust and other substances, fuel for power production in gas engines is obtained, as well as gas for burning in furnaces, under boilers, for illumination and for household use, and such chemical products as tar and ammonia. Even the iron dust in the blast-furnace gas is gathered, briquetted and smelted.

In one great American steel plant the saving amounts to a quarter million horsepower, of which forty-five per cent. is used to generate all the electrical power needed for the works, thirty per cent. is used for heating the blast, and the rest for other purposes. There is a twenty-five per cent. surplus, however, which will eventually be turned into current for electrical furnaces. In France some fifty towns are now lighted by surplus gas from coke ovens.

Even more thorough is the utilization of smoke from copper smelters—a peculiarly offensive nuisance where it is allowed to pollute the air, for the fumes of copper ore, rich in sulphur, kill trees and crops.

In Tennessee there are two smelting plants that turn this obnoxious smoke into sulphuric acid which, in turn, is used to make fertilizer—superphosphate—from the raw phosphate rock abundant in that locality; but the intricacies of the smoke problem will be seen when it is known that such treatment is possible only in a locality where the fortunate combination of raw materials is found. These plants are said to produce the cheapest indirect copper in the world; but for other smelters situated far from supplies of rock phosphate such a process is at present economically impossible.

With the best intentions in the world, however, and after all the big plants in a factory centre have washed their smoke or turned it into gas-engine power or sold it as a by-product, there must still be hundreds of smaller smokemakers to whom these methods are not possible.

Teamwork in Smoke Fighting.

For the small smokemakers—little power plants, railroad locomotives, steamboats, hotels, apartment houses and homes in a section where soft coal is used—there are now two general courses that can be followed: First, organization to spread better knowledge of combustion, better devices for power and heat production, and better firing, so that the black smokecloud may be reduced at least. Second, the use of some smokeless form of power or heat.

The situation to-day is one where the majority of small smokemakers are following the first course, making conditions tolerable until the second course is possible.

Teamwork has abolished far more smoke than all the inspectors, laws, fines, and smoke-prevention devices. Automatic contraptions for eliminating smoke greatly outnumber the perpetual-motion machines, and without teamwork are of about as much practical value.

When there is a strong public sentiment for less smoke in a community everybody takes a little time to understand the complexities of the problem instead of merely letting the smoke inspector classify the worst clouds through his umbrascope or interferometer.

Public sentiment leads smokemakers to take pride in good firing. Fuel is selected with technical knowledge; boilers and furnaces are improved and kept clean; firemen are paid better wages, trained in good firing and paid bonuses for results in power or heat that mean reduction of the smoke evil. Every smokemaker becomes his own inspector, installing some device that shows—down in the engine-room or office—the density of the smoke issuing from the top of a chimney at any moment.

Carelessness and ignorance are said to be responsible for ninety per cent. of the worst smoke, and at the same time the technical knowledge necessary in reducing the evil is available to any community that has sufficient public spirit to get busy on broad, constructive lines. In some places the smoke-inspection bureau is now backed up by a smoke-prevention society of citizens on the lines of the famous one in Hamburg, Germany.

In this latter society the members are chiefly owners of power plants, and they pay five dollars a year for membership, with five dollars more for each boiler. That entitles them to technical advice from the society's engineering experts, who help in the purchase of fuel, try out smoke-prevention devices, inspect members' power plants and suggest improvements, and send round instructors who coach firemen in good stoking methods.

Of course the ultimate remedy for smoke is the use of smokeless power and heat, and these modern blessings are coming much faster than is generally realized and in a number of most interesting forms.

There are the smokeless fuels, for instance. Crude oil is one of them, and is now widely available for power plants, locomotives and ships, in the form for burning directly under boilers. New oilfields and cheaper transportation by pipelines and tank-ships have made it economically possible in sections where it was unknown a few years ago; and even where the first cost appears to be higher it may be quite as cheap.

New Smokeless Fuels.

Petroleum residue contains not much more than half as many heat units as steam coal; but what it does contain can be burned with less waste than coal, and smoke damage is absent. Even where it is too costly for power, it is now the regular fuel for annealing furnaces and lesser devices that formerly contributed their share of smoke.

Then come the coal-gas tars, which have had an interesting history. Some years ago the engineers seized on them as a promising fuel for smokeless steam raising because they were then abundant at two or three cents a gallon; but the automobile came along and these tars were found to be ideal for making dustless roads—and their value quickly doubled and trebled. The experts, however, have developed approved types of burners for utilizing tar under boilers, and are putting at the disposal of power plant owners a series of cruder tars produced in making water gas.

When the oils cannot be burned economically under a boiler they still have vast power-generating possibilities in oil engines which work on the explosion principle; and the explosion engine is being developed in so many ways that it is now an immense factor in smokeless power production.

This type of engine will run on almost anything that can be vaporized into an explosive mixture. Where an automobile must have highly volatile fuel, like gasoline or alcohol, this engine by its peculiar principle will volatilize heavy fuels like crude petroleum, tar oils, petroleum residue and creosote

oils. It has been successfully operated on coal tars and train oil, peanut oil, castor oil, animal oils; in fact it is widely adapted to operate with whatever fuel happens to be cheapest in the locality. Europe has utilized it as a source of power for years, but in the United States its development is just beginning, chiefly because coal has been cheap and could be burned wastefully.

Explosive power is also generated by the producer engine, a type requiring more volatile fuel but run on a gas made from coal burned smokelessly in a special producer plant, Low-grade coals have been utilized, and the gas-producer idea is being applied to sawdust, woodwaste, spent tanbark, cocoanut shells, shavings, coffee and cocoanut husks, olive refuse, cottonseed cake, in fact almost anything burnable that happens to be lying round the neighborhood. It is largely a question of how handy that miscellaneous something happens to be and whether the fellow who wants cheap smokeless power knows enough to utilize it or to find somebody who will tell him.

Then there is the smokeless burning of finely powdered fuel. At a smelter there was a crude-oil burner in use consuming ninety gallons of oil an hour. That was equivalent to nearly half a ton of coal and was cheaper—and, of course, smokeless. A new burner consuming powdered coal was installed and did the same work with only forty pounds of coal an hour and a reduction of cost. By burning coal in powdered form smoke was done away with, and forty pounds did the work of half a ton.

In Sweden a railroad locomotive has been successfully fired with powdered peat on the same plan—a ton and a half of the peat giving results equal to a ton of coal burned in the ordinary way.

Powdered-coal firing is now used in this country for cement works and smelting plants; and, with certain refinements, it will probably have a wider application. The chief drawback is rather a singular one, for the fine coaldust is blown out of a nozzle under pressure and looks just like a gas flame in burning.

Practically nothing goes up the chimney, for the whole burnable substance of the coal is converted into heat almost instantly and the ashes are merely slag. Directed into rock or ore this fierce heat is ideal; but it is a welding flame, and when used under a boiler quickly breaks down metal, firebrick and the most refractory materials. However, it will surely be tamed and set to smokeless steam production in time, and will do its part in bringing about the smokeless era.

In about the same state of development is the mechanical stoker for railroad locomotives—for years the quest of engineers and inventors—certain to cut operating costs, increase the power of locomotives, relieve human muscles of some of the hardest manual labor left in the modern industrial world, and do away with most of the locomotive smoke. Within the past year successful locomotive stokers seem to have been attained. Tests conducted on Eastern roads lead railroad men to believe that the problem has been solved.

Smokeless Cities of the Future.

Our smokeless cities of the future will be run by devices of this sort; in fact, they are run now with smokeless apparatus to such an extent that if to-morrow—suddenly—all the power necessary in operation had to be generated by the crude boilers and hand-firing of twenty years ago the clouds of smoke rising into the heavens would be more than a nuisance: they would be a calamity.

Practically all the research and invention in power production to-day is in the direction of smokelessness. Waterpower is harnessed to turbines, electric current generated and transmitted over systems of conductors that reach farther and farther from the source of power every year. The railroads of the very near future will be operated by electric current and their coal traffic must vanish—for coal is to be made to give up its power before it leaves the mines. It will be distilled in coke ovens of the regenerative type. Its gases and tars will be utilized to run explosion engines, and these will run dynamos—producing current for transmission to the cities.

The coke will go to the cities for heating purposes, and heating will probably be on the central-station system, whereby all the work is done at a single plant and the steam piped to houses, hotels, apartments, stores, factories—or wherever it is needed.

While the electrical men have been busy the gas men have not been idle. Once on a time it was predicted that electric lighting must bring about the extinction of the gas industry; but the gas man has steadily refused to regard himself as a dead one, and in the development of gas cooking in homes and gas appliances for industrial purposes he has set the electrical man a brisk pace.

Together they are running a neck-and-neck race toward the goal of smokelessness—and that is the general goal toward which every other modern tendency in work and living is headed.

WHAT SMOKE COSTS PITTSBURGH.

Here are the items of Pittsburgh's yearly smoke bill, according to Mr. J. J. O'Connor, jr., in the *Scientific American*:

Cost to the smoke maker in the imperfect combustion of fuel (of which smoke is the outward and visible sign), $1,520,740. Better methods of stoking would not only do away with most of the smoke, but would effect a saving of 21.7 per cent. in the present fuel consumption; in other words, about one-fifth of the utilizable fuel of Pittsburgh factories now "goes up in smoke" and is a dead loss.

Cost to the individual citizen: (1) laundry bills, $1,500,000; (2) dry cleaning bills, $750,000. These figures do not represent the total laundry and cleaning business of the city, but merely the excess over what these items would be under ideal conditions of smoke regulation.

Cost to the household: (1) exterior painting, $330,000; (2) sheet metal work, $1,008,000; (3) cleaning and renewing wall paper, $550,000; (4) cleaning and renewing lace curtains, $360,000; (5) artificial lighting $84,000. Houses in Pittsburgh are painted every three years, while in most other cities the houses are painted every six or eight years.

Cost to wholesale and retail stores: (1) merchandise, $1,650,000; (2) extra precautions, $450,000; (3) cleaning, $750,000; (4) artificial lighting, $650,000; (5) department stores, $175,000. Annual damage to merchandise due to smoke in typical stores, exclusive of department stores, ranges from $75 in a drug concern up to $1,500 at a haberdasher's, $2,000 at a florist's, and $3,000 at a stationer's.

Cost to semi-public buildings: (1) office buildings, $90,000; (2) hotels, $22,000; (3) hospitals, $55,000. The additional expense in these cases is analogous in its causes to that borne by private houses. It is found that Pittsburgh office buildings use 15 pounds of cleaning powder per thousand square feet per month, as against 11 required in New York, Boston, Philadelphia, Baltimore, or Washington.

The total bill foots up $9,944,740 per annum; and no attempt has been made to include such items as depreciation in the value of property, absence of various industries which are practically excluded by a smoky atmosphere, and, last but not least, injury to human health.

SHEET METAL WORKERS' STRIKE AT THE A. B. ORMSBY PLANT

The Rival Unions Fight While the Manufacturer Pays the Bill of Costs

THE Sheet Metal Workers' Union has called a strike at the plant of the A. B. Ormsby Company, Limited, because carpenters have been engaged to do work which the union thought should be done by the sheet metal workers.

As the case is attracting widespread attention, and as there are important principles involved, we have asked the Company to present its case to the readers of INDUSTRIAL CANADA. This has been done in the following letter:

Editor INDUSTRIAL CANADA:

"With pleasure we accept your offer to publish in INDUSTRIAL CANADA our side of the cause of the strike at our plant by the Sheet Metal Workers' Union, which commenced June 26th, and is still pending.

"In the first place, it is not purely a local trouble; yet, the local phase of a long-standing jurisdictional fight between carpenters and sheet metal workers.

"Some ten or twelve years ago, for obvious reasons, Hollow Steel Trim, finished by a baked enamel process to resemble wood, began to take its place for the interior finish of buildings, particularly in the large cities which were favorable to skyscrapers. Carpenters, having heretofore an undisputed right to the finishing of buildings, naturally claimed the setting of the substitute, and rightfully so, since by their past training they were the logical craft to install a highly finished product, requiring the skill and care involved in setting beautifully finished woods.

"In New York during 1909 the controversy became acute, and after many meetings between the conflicting parties and the manufacturers an arbitration plan was effected, with the result that Judge Gaynor (later Mayor of New York) was selected as arbitrator by the sheet metal workers, to which the carpenters agreed. The following is Judge Gaynor's decision given verbatim:—

> "'The question presented has proved difficult to answer, but after reading all the evidence and the papers submitted to me, I come to the conclusion that the setting of the iron or steel door trim and doors, samples of which were submitted to me, does not belong to the sheet metal workers. They are thick castings, and not of the kind of sheet metal which the sheet metal workers handle, and to which their tools are adapted. The samples before me are so thick that they have to be cut with a saw, and no doubt such castings may be even thicker. They could not be cut with shears, or bent, or united or worked, or soldered, after the manner sheet metal is handled and fashioned. They are not contemplated by the rules which fix the domain of the sheet metal workers. The method and skill which the work requires does not belong to the craft of the sheet metal workers, but to that of the carpenters. Even though the bucks on which the trim and hinges are to be put be of iron or steel, the case is the same.
>
> "' (Signed)
>
> "'W. J. Gaynor.'

"Not being satisfied, the sheet metal workers appealed from the decision of Judge Gaynor at the Tampa (Fla.) Convention of the Building Trades Department of the American Federation of Labor, and Judge Gaynor's decision was reversed.

"At the St. Louis Convention of the Building Trades Department of the American Federation of Labor, the carpenters were unseated for refusing to comply with the Tampa decision.

"At the Atlanta Convention of the American Federation of Labor it was decided the carpenters were illegally suspended at the St. Louis Convention and were reinstated unconditionally.

"During all this trouble the manufacturers, who, by the way, are really in the best position to judge the merits of the two trades, have, in many cases, suffered considerable losses.

"It has been stated that we are prejudiced against the sheet metal workers, because we put carpenters to work erecting the steel trim in the new Dominion Bank Building, corner King and Yonge Streets, Toronto. We care not which trade does the work, providing it is well and economically done, yet believe it should be our prerogative to decide which we hire. Our experience points decidedly to carpenters, even though their hourly rate is higher than the sheet metal workers, and we have copies of letters from all of the principal manufacturers on this Continent, which, without exception, endorse the carpenters' claims.

"This being the case, we see no reason why we should be compelled against our business judgment, to accede to the sheet metal workers' demands, and emphatically refuse to do so.

"Very truly yours,

"The A. B. Ormsby Co., Limited.

"Per C. J. Hale, Manager."

This strike illustrates how trade unions harass manufacturers.

In the first place, the Sheet Metal Workers' Union tells the company that it cannot engage workmen, other than members of the union, to do certain work. Secondly, this position has been maintained in spite of the fact the company following the example of other companies, believes that carpenters are better qualified than sheet metal workers for this particular work. Thirdly, the union has presumed to punish the company for acting according to its judgment by calling out all union sheet metal workers. Fourthly, while the unions fight the manufacturer suffers considerable loss.



Launching a Lighter at Polson's Iron Works, Toronto

TRANSPORTATION

By J. E. WALSH

FREIGHT CLASSIFICATION.

SUPPLEMENT 3 to Canadian Freight Classification No. 16 has been issued, effective August 10th, 1914. It cancels supplements and contains a number of important additions and changes.

Every member who ships freight should have a copy of the freight classification in his possession; first, to enable him to describe properly his goods when offered for transportation and thus guard against misdescription; second, to check the freight charges demanded of him. Failure properly to describe your goods may result in penalties, and failure properly to check freight charges frequently results in loss.

Overcharge Claims.

Whilst it is illegal for a railway to collect tolls in excess of those called for in their classifications and tariffs lawfully published and filed, it is done every day, in fact it is not uncommon for an agent to ask a receiver of freight to pay in full the charges shewn on the advice note and put in a claim for refund. This is illegal and should not be done.

It is the duty of the carriers to collect no more than the published rate; to do otherwise is wrong and there is a penalty therefor against the carrier and its agent.

Now whilst it is the duty of the carriers to collect only what they are entitled to, it is also the plain duty of all those who pay freight charges to check their freight bills. Some of the large manufacturers do this; others do not exercise the same care under the belief that the matter is too technical and requires expert knowledge; in fact they have in some cases turned over the important part of their accounting to audit bureaus which have recently come into existence.

Whilst some knowledge of rates and classification is necessary, it can easily be acquired, especially when the industry is limited. There is not much difficulty in securing the proper classification ratings. With this information and the current tariff procurable from the carriers, there should not be much difficulty in determining the correctness of the bills when rendered.

Action in the direction mentioned will result beneficially. Try it. The Transportation Department will render any assistance it can.

New Service.

The United Fruit Company, of New York, have now in operation a direct fortnightly freight and passenger service between New York and Santiago, steamers sailing from Pier 33, East River, on alternate Thursdays. Shipping permits should be obtained from M. V. Rodney, Freight Agent, Room 1637, 17 Battery Place, before making delivery of cargo.

PLAYING THE BABY ACT.

Now comes the Interstate Commerce Commission with a scathing denunciation of the directors of the New Haven Railroad in language such as only the vocabulary of a Harlan can yield.

We respectfully ask where was the Interstate Commerce Commission when the robbery was being committed?

Did the commissioners have their heads in the sand, or were they looking up some three-dollar freight claim for an industrial traffic manager who was too busy to attend to it himself?

Some may think the criticism unjustified and say that it is stretching the power of the commission to hold it responsible for the financial end of a railroad, but the commissioners' agents are constantly pawing over the books of the carriers and industrial corporations, and it would seem to us the commission should at least send out a wireless call when it sees a ship sinking.

What is the commission for? Is it to protect the interest of stockholders and of the community in general, or is it merely a quasi-political body chiefly concerned with the drawing up of laborious literary reports and its salary? One yearns sometimes for a commission of actual, tangible utility, that would remedy evils and guard the welfare of the public instead of merely criticising.—*Manufacturers' News.*

MARVELLOUS GROWTH OF C. P. R. TRAFFIC IN LAST TEN YEARS.

Year.	Mileage in traffic return.	No. passengers ex. of passes.	No. of tons of freight.	Passenger earnings.	Freight earnings.
1903	7,748	5,524,198	10,180,847	$11,001,973	$28,502,081
1909	9,878	9,784,450	16,549,616	20,153,000	48,182,520
1910	10,270	11,172,891	20,551,368	24,812,020	60,158,887
1911	10,480	12,080,150	22,536,214	28,165,556	65,645,227
1912	10,983	13,751,516	25,940,238	31,812,207	79,833,734
1913	11,601	15,480,934	29,471,814	35,545,061	89,655,223

—*From the Financial Post.*

THE PROPER USE OF WARNING SIGNS.

Warning signs should be used only where the danger is not immediately obvious. The only object of a sign is to draw men's attention and make them more cautious. If all places where accidents are liable to happen were guarded with a sign, the signs would be so numerous around the plant that the men, becoming accustomed to them, would grow correspondingly careless.

Judiciously placing a few signs is certainly a wise practice, but in the end a natural caution must be instilled in the minds of the men. This can be done to a great extent by keeping "Safety First" constantly before the men with bulletin boards and other forms of safety advertising. But, to be absolutely successful in this respect, you must have the co-operation of the men. The example and tact of the foreman can procure this much better than any other means.

Warning signs in places where the danger is not evident are an absolute necessity, but the careless employee is sure to be hurt, no matter how careful an employer is in providing warnings and guards.

Until men naturally look before they step, accidents will be found to happen.—*Safety Engineering.*

INSVRANCE

A SOMEWHAT amusing example occurred recently which shows very forcibly how difficult it must be for a paper accepting advertisements from insurance companies to give unbiased advice to its subscribers. While, probably, in a number of cases, such periodicals have every good intention, it will be apparent that they must be biased in favor of their advertisers, and there is also no doubt that many of the so-called "Experts" are quite incompetent to give satisfactory advice.

A weekly publication of Vancouver called *Saturday Sunset*, which has opened an "Insurance Section," wrote a very abrupt letter to the North British & Mercantile Insurance Company demanding annual reports and copies of policies, adding a paragraph to the effect that no doubt that company would find it a profitable investment to be represented in the Insurance Section "in an advertising way." The journal in question was referred for the desired information to Government Blue Books and was advised that policies were in conformity with the British Columbia statutory conditions. Apparently, however, the manager of the insurance company did not show a practical appreciation of the value of advertising, for, a couple of months later, the Insurance Section of *Saturday Sunset*, replying to a correspondent inquiring as to the standing of the North British and Mercantile, published a statement of which the following is an extract:—

"The company you mention is an old and strong company, but I notice in the last report of the United States office that I have where claims aggregating about $75,000 have been resisted, and that $384,000 are in course of adjustment. The Head Office for Canada refused to furnish me with either financial statement or sample of policy, and I cannot, in view of circumstances and your own statement, recommend it."

The Company which this new "insurance expert" cannot recommend has been transacting business in Canada since 1862 and, as every insurance man knows, has a most excellent record for probity and fairness. No one but a tyro in insurance matters would expect a company of the size of the North British and Mercantile to have all claims adjusted and settled at the end of each year.

Explosion Hazard.

A writer in the *Traveller's Standard* has recently contributed an interesting article on what is known in insurance circles as the "Explosion Hazard." We quote the following:

"Dust explosions may be started in various ways, and when the combustion of the suspended dust has once begun, the flame spreads through the air with lightning speed, often giving rise to appalling devastation. The difference between suspended dust and dust lying in a quiescent, compact mass may be clearly illustrated with lycopodium powder, which was formerly in general use by druggists for coating pills, to prevent them from sticking together. A little heap of the powder can be set afire, with some trouble, but it does not show evidence of any explosive properties. If a small quantity be taken up in the end of a glass tube, however, and blown through the flame of a spirit lamp, it burns explosively and with a brilliant flash of light. This experiment is simple and instructive, but it should be performed with care. The quantity of powder used should be quite small, and the glass tube should be of sufficient length to enable the experimenter to keep his face well away from the spirit-lamp flame.

"A particle of combustible dust, when burning while suspended in the air, heats a little shell of air immediately around it to a high temperature. The air thus heated expands very quickly and forcibly, and to get a clear idea of what happens in a dust explosion, we have merely to imagine this action repeated almost simultaneously about every one of the thousands of millions of particles that are involved in the explosion. It will be plain that the total effect may easily be prodigious and quite capable of killing men, blowing down walls, and doing other damage of like nature, such as we actually observe when dust explosions occur.

Dust and Explosions.

"The amount of dust that must be present in the air to make an explosive mixture will naturally vary to some extent with the nature of the substance, and the subject has not yet been fully investigated by experiment. . . . The mechanical energy actually available for the performance of destructive mechanical work, in the case of a starch-dust explosion, may easily be as great as 3,600 foot-pounds for each cubic yard of the air in the space in which the dust occurs. A million foot-pounds of mechanical energy, available for the destruction of the building, could therefore be developed in a room of very ordinary dimensions. This calculation, which is given for illustrative purposes only, proves that dust explosions are well worthy of the most serious attention, and that those who lightly dismiss them from consideration are grievously in error.

"It is convenient to divide explosive dusts into two general classes, as follows:

"Class 1: Dusts which propagate the flame readily, and ignite so easily that an explosion would almost certainly be produced by lighting a match in the dust-laden space. This class includes sugar, dextrin, starch, cocoa, rice refuse, meal and sugar refuse, cork, fine wood dust, malt, oat husks, grain in flouring-mills, maize, grain in storage, corn flour, and flour in flouring-mills.

"Class 2: Dusts which are readily ignited, but which ordinarily, though by no means invariably, require a source of heat (such as an arc-lamp) of larger size and higher temperature, or a source (such as a gas-jet or other flame) that acts for a considerable time. These include the dusts from gum, leather, rice-milling, sawdust, grist-milling, mustard, shoddy, and shellac compositions.

No Dust Safe.

"The dusts in Class 1 are arranged approximately in the order in which experience has shown them to be most hazardous. It must not be inferred from this, however that the last ones in the list are to be thought reasonably safe, because all the substances that are enumerated are dangerous. The earlier ones are merely considered to be more dangerous.

"Sugar, dextrin, starch and cocoa, it will be seen, are classed as the most hazardous of all, and many fearful explosions have resulted from the dust of these substances. Sugar dust ignites without contact with actual flame, if it is projected against a surface heated to 1,400 degrees Fahr.

"Processes in which dangerous dust is produced, and which cannot be effectively safeguarded by methods similar to those here indicated, should be conducted in separate buildings placed at some distance from the rest of the plant, and preferably only one story in height. The machines in a building

(*Continued on page* 72.)

TARIFF

By J. R. K. BRISTOL

THE following Customs decisions have been reported to the Tariff Department:

Board of Customs Decisions—Effective on and After July 14th, 1914.

Soft rubber in sheets (per sample), dutiable under Tariff Item 618. By the provisions of this item the duty payable under the British Preferential Tariff is 15% and under the General Tariff 27½% ad valorem. This soft rubber in sheets compares in appearance with prepared rubber in sheets as required for manufacturing rubber stamps, etc.

Rubber insoles and heels (per sample), for use on boots and shoes, Tariff Item 618. Rates of duty same as above.

Malt Nutrine (per sample), manufactured by Anheuser-Busch Brewing Association, Tariff Item 220. By the provisions of this item the duty payable under the General Tariff is 50% ad valorem.

Departmental Rulings.

Clover bunchers for use on mowers, dutiable under Tariff Item 448. By the provision of this item the duty payable under the British Preferential Tariff is 15%, and under the General Tariff 25% ad valorem.

Adjustable grain lifter guards (malleable iron), for use on mowers and binders, dutiable under Tariff Item 448. Rates of duty same as above.

Nulomoline (per sample), dutiable under Tariff Item 139 as grape sugar or syrup. Under this item the duty payable under the British Preferential Tariff is 40 cents, and under the General Tariff 62½ cents per 100 pounds. This rating supersedes prior rulings on this article.

Golf bags of cotton and leather, and dunnage or cabin bags of cotton with nickel handle, dutiable under Tariff Items 424 or 622. By the provisions of these items the duty payable under the British Preferential Tariff is 20%, and under the General Tariff 30% ad valorem.

Pine needle oil, without admixture (per sample), dutiable under Tariff Item 261. Under Tariff Item 261 free entry is allowed.

Woven asbestos cloth (fabric in the web), even although strengthened with wire woven therein, may be entered for duty under Tariff Item 312, so long as asbestos is the component material of chief value, and provided such fabric in the condition imported is not a prepared packing, belting, brake band lining or the like. By the provisions of Tariff Item 312 the duty payable under the British Preferential Tariff is 15% and under the General Tariff 25% ad valorem.

Molasses of cane testing by polariscope under 35° but not less than 20°, Item 136A, so long as the test of the said molasses is certified by the exporters on the invoices produced for Customs entry purposes.

Special or Dumping Duty.

By Appraisers' Bulletin 869 Collectors of Customs are instructed that special or dumping duty is to be collected in all cases where the selling price for cash to the purchaser in Canada is more than 7½% lower than the value of the goods for duty purposes. Thus, in cases where the purchaser in Canada is granted a 7½% export allowance, if the cash discount exceeds 2½%, special or dumping duty will be leviable.

Wire Gauge—In Appraisers' Bulletin No. 856 Collectors of Customs are instructed on the foregoing subjects as follows:

"In view of the provisions contained in Item 404 of the Customs Tariff Amendment of 1914, Bulletin No. 779 of February 23rd, 1914, respecting wire gauges, is hereby cancelled.

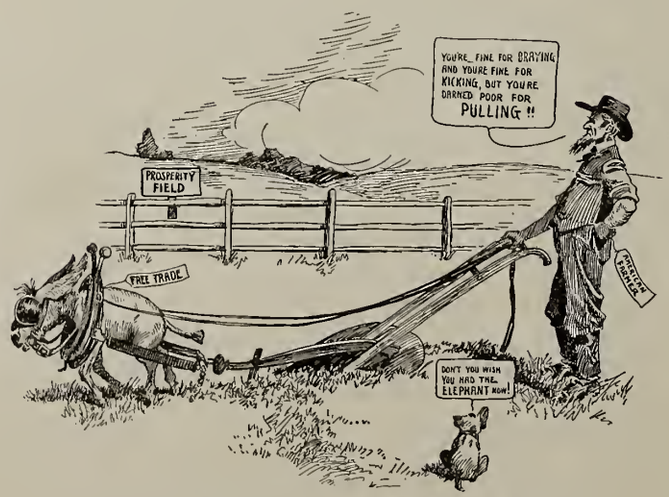
"In regard to wire subject to duty or dumping duty, as there is usually an extra charge made for drawing wire smaller than the base size (No. 9) and as such charge varies according to the gauge of the wire, the following rules may be observed in estimating the charge for 'extras' entering into the value of the wire, viz.:

"For the purpose of computing extras on wire of irregular gauge number, the size of the wire may be reckoned as represented by the next smaller gauge (higher number) as numbered on the Imperial Wire Gauge.

"Under Tariff Item 404, steel wire of Nos. 9, 12 or 13 gauges must not vary more than four one-thousandths of an inch from such gauges in order to be admitted free, otherwise such wire is dutiable."

The gauge numbers from No. 1 to 30, inclusive, and the corresponding diameters in decimals of an inch as shown on the Imperial Standard Gauge are as follows:

No. 1	.300	No. 16	.064
2	.271	17	.056
3	.252	18	.048
4	.232	19	.040
5	.212	20	.036
6	.192	21	.032
7	.176	22	.028
8	.160	23	.024
9	.144	24	.022
10	.128	25	.020
11	.116	26	.018
12	.104	27	.016
13	.092	28	.014
14	.080	29	.013
15	.072	30	.012



Poor Animal for the Kind of Work.
—American Economist.

LEGISLATION

BY F. W. WEGENAST

THE Extra-Provincial Licensing laws continue to be a fruitful source of litigation, and the accumulation of legal decisions is serving the purpose of indicating more clearly the true position of incorporated companies with respect to these laws. In a recent case in the Province of Alberta the Supreme Court held that an action begun by an extra-provincial company before being registered in accordance with section 10 of the Ordinance of 1913, chap. 14, first session (Alberta) which declares that no such company, while unlicensed, shall be capable of "maintaining" any action in any court of the province, will not prevent the action being prosecuted to final judgment if the extra-provincial company was registered in compliance with the Act—*during the suit;* since it is only the "maintenance" and not the bringing or commencement of an action that is prohibited by the Act. To the lay mind this decision may appear to be judicial hair-splitting, but as a matter of fact it is in accordance with a well-known principle of law which prescribes that when any legislation of a drastic nature is put on the statute books the broadest possible interpretation shall be placed upon it by the courts in order to modify its severity.

British Columbia Test Cases.

The test cases in connection with the British Columbia foreign companies legislation, which has been the subject of considerable inconvenience and annoyance to manufacturers who transact business in that province, reached the final stage of appeal and came before the Privy Council last month. These cases, in which the John Deere Plow Company were plaintiffs (appellants), were brought, it will be remembered, with a view to testing the constitutionality of the British Columbia Companies Act and obtaining the opinion of the court as to whether it is competent for a provincial legislature to exclude from the Province a company possessing a Dominion charter. A decision of the Privy Council has not been received at the time of writing, but interested members will be duly notified of the result either by circular or through an insertion in INDUSTRIAL CANADA.

Farm Machinery in West.

The Act respecting Farm Machinery of Alberta, which empowers judges of that Province to review lien contracts made in respect of farm machinery and to declare whether they are reasonable and binding or not, has, as anticipated, resulted in a general restriction of credit on farm implements. It is significant that the proposal to adopt a similar measure in Manitoba was rejected by the Legislature of that Province.

A Sales Contract.

The following important decision on a sales contract was recently delivered by the Supreme Court of Saskatchewan:

"Where a contract for the supply and installation of heavy machinery requires delivery on the works to be made by the seller, and provides that the seller shall be responsible for all damages until completion, and where the seller asks the buyer to have it unloaded and advise when men are to come to install the same, the buyer who gratuitously undertakes to assist the seller by hiring a competent cartage company to do the unloading at the seller's expense is not responsible for damage to the machinery in the latter's handling of same, where there has been no negligence by the buyer himself." (John Inglis Co., Limited, v. City of Saskatoon, 15 D. L. R. 603.)

Accident on Scaffolding.

The case of Resinoff v. Friedman decided by the Supreme Court of Minnesota is of interest, as it relates to an accident as a result of a defect in scaffolding. It appeared that the plaintiff who had entered into a contract with the defendant to furnish and put in place tin valleys and gutters for the house at a specified price, was injured by the breaking of one of the timbers in a scaffold erected by carpenters who were independent contractors in the construction of the house. The court held that while defendant owed plaintiff the duty of exercising ordinary care to avoid injuring the latter, he was not bound to inspect the timber selected by the carpenters for the scaffold, and in not doing so he was not guilty of a breach of his duty to avoid ordinary care to prevent injury, and that the relation of master and servant did not exist between the plaintiff and the defendant, so that the latter was not bound by the obligation to provide a safe place to work for the former.—*Bradstreet's.*

New York Compensation Act.

The Workmen's Compensation Act of New York State, which in a number of its essential features follows the bill drafted by Sir William Meredith for the Province of Ontario, went into force on July 1st. The Act establishes a State Workmen's Compensation Commission whose duty it will be, among other things, to adjust claims and strike insurance rates. While the law makes the insurance of all workmen a compulsory matter, it allows employers the option of taking out insurance in the state fund or in a stock or mutual insurance company. The insurance rates, which are based on the supposition that 33 1-3 per cent. of all the premiums will be absorbed in collectors' commissions and overhead charges, are said to be 200 per cent. higher than those of the State of Massachusetts.

Beware of Ontario.

Word has been received at this office that the Province of British Columbia is contemplating the enactment of a modern Workmen's Compensation law. It is to be hoped that the British Columbia Government will not rely too much on the new Ontario Act, which in many of its details calls for radical amendment, but will conduct a separate and independent investigation into the subject and arrive at a conclusion which will adapt itself to the exigencies of that Province.

As INDUSTRIAL CANADA went to press we received a cable from Mr. F. W. Wegenast, Legal Secretary of the C. M. A., stating that the argument in the British Columbia cases, testing the constitutionality of the Foreign Companies Act of that Province, which were appealed from the Canadian courts to the Privy Council, has been completed. Judgment has been deferred, but will probably be handed down about the middle of October.

(*Continued from page* 69.)

of this kind should be so arranged that they can be stopped and started from the outside.

The building should also be fitted with self-closing and self-locking doors, which cannot be opened from the outside without a key. This lessens the probability of workmen entering it while the machinery is in motion."

Lightning Rods.

A very interesting booklet dealing with the value of lightning rods has been issued by Professor W. H. Day, of the staff of the Ontario Agricultural College. Professor Day deals with a large number of experiments which have been carried out to prove the value of a properly constructed rod to attract a flash of lightning and deflect it from the building rodded. Reports were obtained for the year 1912 from all the mutual insurance companies doing business in Ontario, which showed astounding results. In every 7,000 unrodded farm buildings insured by these companies, thirty-seven were struck by lightning; but out of every 7,000 rodded farm buildings insured, only two were struck, and even these were only damaged. These figures mean an efficiency of ninety-four and one-half per cent., while similar reports obtained in 1913 show an efficiency of ninety-two per cent. Experience appears to prove that rods of any metal will give good protection so long as they are in good repair and properly installed. The relative value of the rods depends upon their respective durability and in this copper is indisputably superior to iron.

Fire-trap Hotels.

Statistics compiled by "Safety Engineering" show that there have been 162 hotel fires in ninety-two days in Canada and the United States, involving propery values of $4,500,000, with an average loss per fire of $28,000. In nearly every case guests were killed and injured. The paper declares that ninety-nine per cent. of the hotels in the United States and Canada are fire traps and that each of these should have tacked over the door, "Fire-trap Hotel." Forty-seven resort hotels burned in the first four months of 1914, seventy per cent. of the fires occurring at night. "Safety Engineering" suggests that, if holiday makers would ask questions about the fire protection of resort hotels as well as about cuisine and amusements, hotel owners would soon be compelled to make improvements which could not fail to result in a saving of life and property.

The Saskatchewan Liquor License Commission is making rigid enquiries into the question of fire protection in hotels. other requirements formulated by the commission will be an affidavit by each hotel proprietor that a stout cotton rope is attached to the wall at a window in each room.

Fires in Apartments.

A pamphlet issued by the National Fire Protection Association points out the great dangers from fire in the average modern apartment house. Several important recommendations are made, including the following:—

The basement, at least, and all its lockers and partitions should be fireproof. It should be cut off from the floors above by standard fire doors and a floor of fire resistive material. Unbroken vertical openings from basement to roof should be prohibited, as they form a very efficient flue in case of fire. Outside fire escapes at their best are an inferior means of egress. When their stairways pass ordinary windows they may be quickly rendered impassable by flames. Where installed they should be located against blank brick walls, or windows which they pass should be of metal frames and wired glass.

A person who does not know how to send in a fire alarm is unfit for the responsibility of citizenship. Any policeman will show how, if asked. Every man who to-day builds a fire trap knows it is a fire trap.

Insurance Key Ratings.

A number of inquiries have been received with regard to the value of a book entitled "Insurance Key Ratings, 1914," issued by the Insurers' Alliance, Limited. Messrs. Alfred M. Best, Incorporated, the recognized authorities on the subject of the rating of insurance companies, publish a strong protest that this work has been pirated wholesale from a volume with a similar title issued by them, with the exception that the former deals only with companies licensed to do business in Canada whereas the latter confines itself to companies operating in the United States. The Canadian publication, however, bases the financial rating of the various companies on their gross assets, whereas the volume published by Messrs. Best bases the financial rating upon the surplus to policyholders. It is obviously absurd, when estimating the financial standing of an insurance company, to place any value on the company's "admitted gross assets" without any reference being made to its liabilities. A company with gross assets of five million dollars might easily be in a much less sound position than a company with gross assets not exceeding half a million dollars.

SOLVING THE HOUSING PROBLEM.

At the recent Imperial Health Conference, the question of housing occupied considerable attention. One of the Ontario representatives was Mr. G. Frank Beer, President of the Toronto Housing Company, Toronto, who has just returned from a visit to Europe, where he investigated town planning and housing in some of the more important cities.

In municipal housing, of which a great deal has been done in Great Britain, Mr. Beer says he found a general disposition to warn other communities to consider carefully the effect and cost before engaging in it. In Liverpool, for instance, where municipal housing is probably more successful than elsewhere, the opinion was expressed that other cities should not copy Liverpool's example unless their own particular cases warranted such procedure. Liverpool was faced by an altogether exceptional condition, and met its responsibility with great courage. Upwards of £1,500,000 have been spent to date in wiping out the slums and rehousing the people dispossessed. The direct annual loss to the city in connection with this undertaking is over £30,000, but it is thought that a saving to the same amount or even a greater amount is effected in lessened death, disease, and crime. Colonel Kyffin-Taylor, chairman of the Liverpool Housing Commission, stated that the general death rate in the re-housed districts has been reduced by 8 per 1,000, and the death rate from tuberculosis by 38 per cent. A similar diminution in crime has been noted.

By almost general consent the delegates at the Imperial Health Conference agreed that housing reform for the future will be secured along the following lines: 1. Universal and compulsory town planning. 2. Proper linking together of town and country by improved means of transit. 3. Ample and simple powers given to municipalities by which they may acquire land for housing purposes, not at an exaggerated price, but at its fair market value as ascertained for purposes of local taxation. 4. Compulsory improvement of unsatisfactory houses by landlords. 5. Municipal clearing up of slums, even if it costs money. 6. Closer supervision of plans and construction of new houses. 7. Co-operative and limited dividend building companies. 8. Methods of finance which will overcome the difficulties of the "second mortgage."

BUYING AT HOME.

The following letter, showing the effect buying at home would have on the present commercial depression, was sent to INDUSTRIAL CANADA by Mr. William Taylor, of Taylor & Pringle Company, Limited, Owen Sound. We are glad to publish it, especially as it supports a policy which is constantly advocated in our editorial columns:

OWEN SOUND, July 7th, 1914.

Editor INDUSTRIAL CANADA:

Dear Sir,—The quickest way to lift the present slight depression in business in Canada would be for the buyers in all the wholesale houses in Canada to put their shoulder to the wheel and buy Canadian-made goods, instead of trying to push imported goods.

The buyers would no doubt tell us that the people ask for imported goods, and they must buy what the people want and ask for. Grant they are right, then it is up to the people themselves to help lift this slight depression by using Canadian-made goods. It is up to, not only the men, but the women of our country to do so, and so insist on purchasing Canadian-made goods, thus helping to give employment to their husbands, their boys and girls. Many a man is idle to-day because, indirectly, his wife, his family, or perhaps he himself, is buying foreign goods, thus giving employment to people in a foreign country, instead of our own men and women.

I do not wish to specialize on any particular line, but just look over the monthly reports from the Government, and you will find that thousands and thousands of dollars' worth of goods being imported into our country every month which could very well be manufactured here, and the Canadian goods are fully as good, and in some cases better, than the imported.

So many people have come to this new country from other lands, they continue to ask for their own country's goods, and then wonder why they cannot get employment, whereas if they would buy Canadian-made goods they would be the means of giving employment to either themselves or their fellow countrymen and women. Now the only way to my mind is to educate the people to buy Canadian-made goods. The manufacturers of Canada are advertising and doing their best in this line.

Could the Canadian press not help out as well? They write columns of matter on politics, temperance and religion, and yet when it comes to bread and butter for our own people, or the simplest and true way to obtain it, they are almost silent. Perhaps they have not taken this view of the matter before, but it is to be hoped they will in the future, and help by impressing upon the people the importance of asking for and using Canadian-made goods, thus giving employment to our own people, not only in factories, but as well in the production of the raw materials.

A DOZEN LAMPS IN PLACE OF FOUR.

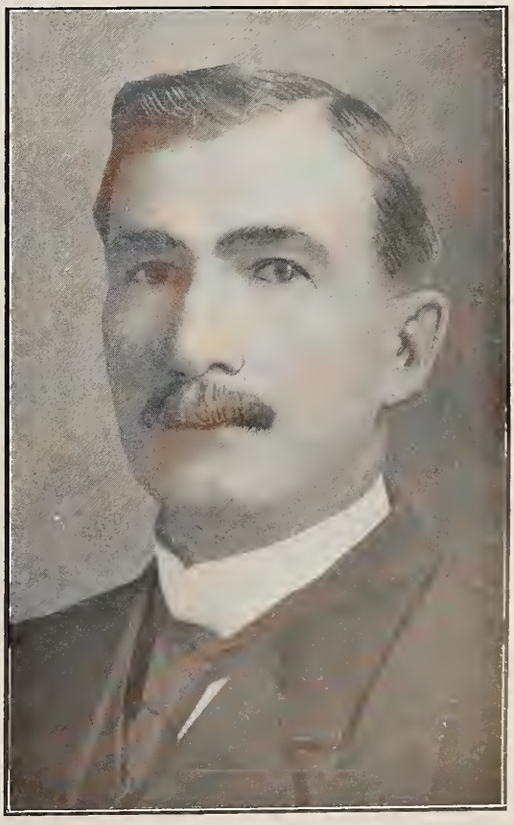
A British accessory manufacturer has attacked the automobile illumination problem in a brand-new manner. Instead of using four lamps, two of them high-power for touring and two much smaller for city driving, he provides no less than twelve small lamps, which are arranged in a row in the filler board between the wind shield and the top of the engine hood. During the time the lamps are not in use they are completely covered by a sliding shutter. For city driving only the two outside lamps are lighted. Where more light is required more lamps are lighted, and when the maximum illumination of the road is necessary, all of them are turned on. The most important feature of the arrangement, however, is that the angle of the group of lamps can be varied at the will of the driver, so that any part of the road can be illuminated, sign posts can be shown up, or, on occasion, the reflectors can be shifted so that the light is turned down onto the engine for repairs at night. The lamps are shifted by a simple worm and gearing which is operated by a small hand-wheel placed upon the dash of the car. Another advantage is that the row of lamps does not mar the outward appearance of the car as do the ordinary lamps.

CHAIRMAN OF WORKMEN'S COMPENSATION BOARD.

Mr. Samuel Price, K.C., of St. Thomas, Ontario, has been appointed Chairman of the Ontario Workmen's Compensation Board by Sir James Whitney.

Mr. Price is fifty-one years of age. He was educated in the public school, and at Strathroy and St. Thomas Collegiate Institutes. Later he graduated from Trinity University, Toronto. He obtained the B.C.L. degree, with gold medal, and was shortly afterwards called to the bar. With Hon. Mr. Crothers, Minister of Labor, he formed a legal partnership in St. Thomas under the name of Crothers and Price.

Mr. Price has served on Royal Commissions both in a



Mr. Samuel Price, K.C.

Dominion and a Provincial connection. In politics he is a strong Conservative, having been at one time President of West Elgin Conservative Association.

A great opportunity awaits Mr. Price. He has a faulty Act to administer and many of its clauses must be liberally interpreted if practical results are to be secured. A demagogic chairman, applying the extreme limits of the Act, could almost paralyze industry in the Province of Ontario. On the other hand, a man of sound and just mind, as we believe Mr. Price to be, may interpret the Act so as to accord justice to injured workers and their dependents without crippling factory owners.



Major A. M. Panton, K.C.
President, North Battlefield Board of Trade

"TEN MILLION SETTLERS IN TEN YEARS."

A plan to bring 10,000,000 settlers to Canada in ten years was formed by the recent Colonization and Development Convention at North Battleford. In support of this ambitious programme, the Convention passed the following resolutions:

(1) The intelligent and effective dissemination of reliable information with regard to the possiblilties and resources of Western Canada as a whole; and, with the above object in view, the appointment forthwith by this Convention of a provisional committee, charged with the duty of taking such steps as they may deem necessary to secure the co-operation of the various bodies interested in the early formation of a permanent organization.

(2) The inspiration of every individual with the idea that he should be an active agent for the colonization and development of our country.

(3) The systematic interchange between the several bodies interested of the results obtained from the various policies pursued by each unit, so as to extend to all the benefit of the experiences so acquired.

(4) The establishment of an impartial bureau for the giving of unprejudiced and reliable information as to the conditions existing in each locality.

Major A. M. Panton, K.C., President of the North Battleford Board of Trade, has been elected president of the provisional committee which will begin a colonization and development propaganda.

THE MEANING OF MIXED FARMING TO THE MAN OF SMALL CAPITAL.

Discussing the desirability of diversified farming, a bank manager in a town in Saskatoon district made the following statement:

"I have a customer who purchased two brood sows a year ago for $50. From these, he raised twenty four pigs, selling twenty-two of them for a total of $402.88. His feed bill and all other expenses amounted to $167. He still has four hogs remaining, and as these are worth $120, the venture actually nets him a profit of $305. In raising the hogs, he used up 200 bushels barley, 150 oats and 50 wheat. He keeps a perfect set of books which show that his feed worked out in pork at about $1.00 per bushel. The same man also bought eight cows at the same time as he purchased the hogs, and during the year, made 1,513 pounds of butter, 1,126 pounds of which he sold for $356.70, or an average of 31 cents per pound. From skim milk, he also raised twenty-six calves worth about $424, and as his expenses in this direction were $268, his net profit was $512."

During 1913, Western Canada imported from Eastern Canada, United States and New Zealand about 25 million pounds butter, 50 million pounds meat and seven million dozen eggs—all for local consumption. It is therefore obvious that Western Canada needs mixed farming.

WILL OIL REPLACE COAL AS FUEL?

Total Available Liquid Fuel Supplies Inadequate to Make General Substitution Possible—Opportunities Exist, However, for More Extended Use.

The world's production of crude petroleum in 1912 amounted to about 52,921,750 tons; the sources, respective quantities and percentages were as follows:

Country.	1912. Tons (2,000 lbs.)	Percentage of Total Production.
United States	32,897,060	62.16
Russia	10,174,560	19.23
Mexico	2,910,000	5.50
Roumania	1,987,360	3.76
Dutch East Indies	1,672,000	3.16
Galicia	1,298,620	2.45
India	1,101,450	2.08
Canada	38,750	0.073
Other countries	841,250	1.59

If the whole of this crude petroleum were employed as fuel in steam-raising it would not replace, allowing for its higher thermal efficiency, much more than five and one-half per cent. of the world's output of coal, whilst if used in internal combustion engines it would be equivalent, as a source of power, to about sixteen per cent. of the coal. Only a small proportion, however, of the crude petroleum can be regarded as available for use as a source of power, for by far the larger part is in demand as an illuminating agent and as a lubricant for machinery.

As the United States produces over sixty-two per cent. of the world's production of petroleum, it is interesting to note that Dr. Day, of the United States Geological Survey considers that, at the present rate of increase of the output of petroleum, the known oil-fields of the United States will, on the basis of the minimum quantity of oil obtainable, be exhausted by the year 1935, while, even if only the present output were maintained, the supply would, on the same basis, not last more than nineteen years.

In many countries there are, no doubt, vast tracts of undeveloped petroliferous territory, but only drilling can determine this. Even if the available deposits were far larger than there is reason to believe them to be, the cost of doubling the present output would be great. In view of these circumstances, it is not probable that there can be any general substitution of petroleum for coal as a source of power, although there is undoubtedly opportunity for making provision for a larger use of liquid fuel for certain purposes in which its advantages are conspicuous.—*W. J. D. in Conservation.*

NEW MANUFACTURING COMPANIES.

The following Companies have been recently incorporated for manufacturing purposes:

J. A. King & Co. (Canada), Ltd., Montreal, Que....	$150,000
Du Pont Safety Powder Co. of Canada, Limited, Montreal, Que.	2,000,000
Independent Silk Co., Ltd., Montreal, Que.	100,000
Chaleurs Bay Pulp & Paper Co., Ltd., Sherbrooke, Que.	100,000
Arnold Art Stone Co., Ltd., Winnipeg, Man.....	60,000
Compagnie de Parfumerie Francaise de Victoriaville, Ltee., Victoriaville, Que	20,000
Detroit Sulphite Pulp & Paper Co., Windsor, Ont...	100,000
Canadian Novelty & Supply Co., Ltd., Waterloo, Ont.	60,000
Excelsior Electric Mfg. Co., Ltd., Toronto, Ont.....	40,000
The Galt Wire & Ornamental Iron Co., Ltd., Galt, Ont.	40,000
Interstate Electric Novelty Co. of Canada, Ltd., Toronto, Ont.	40,000
Fibre Boxes, Ltd., Toronto, Ont.	40,000
Canadian-Detroit Steel Products, Ltd., Windsor, Ont.	40,000
Blachford Shoe Mfg. Co., Ltd, Toronto, Ont.	40,000
The Uxbridge Piano Co., Ltd., Uxbridge, Ont.....	300,000
Prince Rupert Lumber Co., Ltd., Winnipeg, Man...	100,000
The Rock Island Tobacco Co., Ltd., Quebec, Que. ..	200,000
Standard Cleaning Products, Ltd., Hamilton, Ont...	100,000
Northern Trap Rock Co., Ltd., Toronto, Ont.	1,000,000
Ford City Metal Products, Ltd., Ford City, Ont....	100,000
Niagara Falls Pickles, Ltd., Niagara Falls, Ont.....	40,000
The Ontario Concrete Post Co., Ltd., Brantford, Ont.	40,000
The International Izene Co., Ltd., Winnipeg, Man...	500,000
Kortum Co., Ltd., London, Ont	25,000
Dominion Linens, Ltd., Guelph, Ont.	300,000
Canadian Storage Battery Co., Ltd., Toronto, Ont...	40,000
Stratford Davenport Co., Ltd., Stratford, Ont.	25,000
International Safe & Register Co., Ltd., Fort Erie, Ont.	100,000

THE WORLD'S TRADE WITH CHINA.

	Per cent.
Great Britain (including Hong Kong, British India and the Straits Settlements)	50.
Japan and Corea	18.
United States	8.5
Russia and Siberia	8.
France and Indo-China	5.5
Germany	4.
Holland and Dutch India	1.9
Belgium	1.8
Italy	1.4
Portugal (Macao)	1.3
Austria-Hungary	0.5

It will be seen from this table that Canada's trade with China, as has been said, is negligible, but there are enormous possibilities for future development. It is possible that our millers may be able to work up a very good export business in flour with the East, although at present the United States has the bulk of that trade. Then, again, there are great possibilities for the development of trade in textile lines and in many other directions. We are nearer to China than is any other manufacturing nation. As our industry grows, we shall undoubtedly find in that field a market for great varieties of our wares.—*Journal of Commerce.*

TRADE UNIONISM OF THE WORLD.

Increase Marked in Great Britain.

The Department of Labor has issued a report which shows the trade union standing of the world's principal industrial nations:

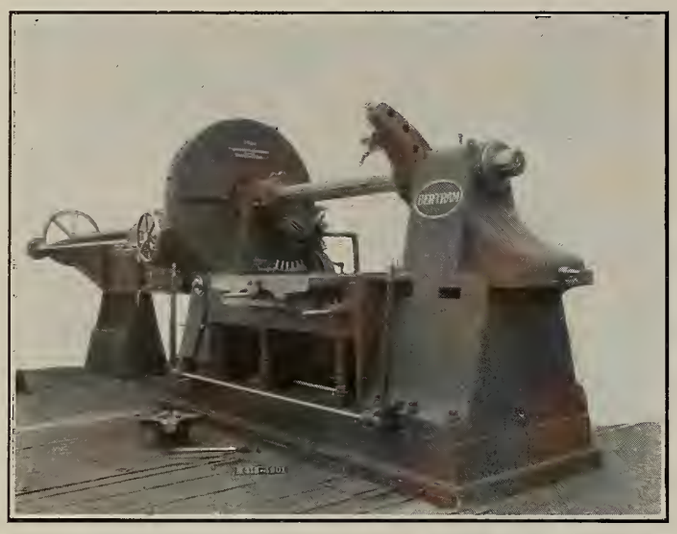
Country.	Union membership 1911.	Union membership 1912.	Population	Percentage of union membership to total population. 1912.
Great Britain	3,010,346	3,813,973	45,365,599	8.407
France	1,029,238	.....	39,601,509	....
Belgium	92,735	231,805	7,516,730	3.083
The Netherlands ..	153,689	169,144	5,945,155	2.845
Denmark	128,224	139,012	2,757,076	5.042
Sweden	116,500	121,866	5,521,943	2.206
Norway	53,830	60,975	2,391,782	2.549
Finland	19,640	23,839	3,120,264	.764
Germany	3,061,002	3,317,271	64,903,423	5.111
Austria	496,263	534,811	28,321,088	1.888
Bosnia-Herzegovina	5,587	5,522	1,898,044	.290
Croatia-Slavonia ..	8,504	6,783	2,416,300	.276
Hungary	95,180	111,966	20,840,678	.537
Servia	8,337	5,000	2,911,701	.171
Roumania	6,000	9,708	6,966,000	.139
Switzerland	78,119	86,313	3,741,971	2.306
Italy	709,943	860,502	34,687,000	2.451
Spain	80,000	100,000	19,588,688	.510
United States	2,282,361	2,496,000	91,972,266	2.713
Canada	160,120	175,799	7,204,527	2.440
Australia	364,999	433,224	4,733,359	9.152
New Zealand	55,629	60,622	1,070,910	5.660

The total trades union membership of the world for 1912 stood at 12,094,490, a slight increase over the number reported for 1911, which was 11,435,498. In the above table it will be observed that the union membership during 1912 increased more rapidly in Great Britain than in Germany, the first named country having an increase of over 800,000 and the latter slightly over 256,000, giving Great Britain nearly half a million more of a trades union membership than Germany.

The United States stands third, but especially having regard to its much larger population, considerably below Great Britain and Germany. The statement above printed, however, shows Australia as the most highly unionized country in the world.



Not on Your Life.—Kirby, in the "New York Sun."

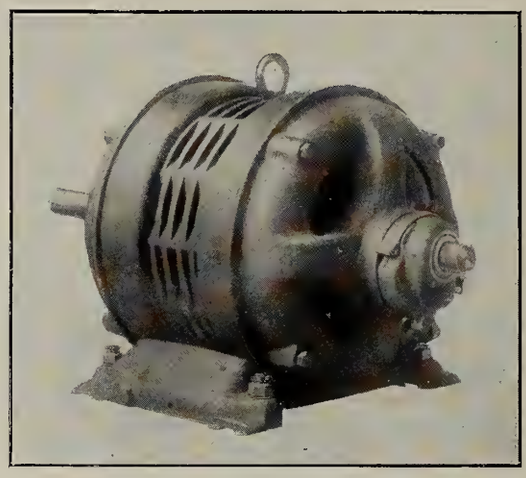


Locomotive Cylinder Boring Machine
(John Bertram & Sons Co., Dundas)

This machine is of the heaviest construction and is especially designed for boring and facing the piston and valve chambers of large locomotive cylinders. It has a capacity for boring and facing both ends simultaneously of cylinders up to 50 inches (1,270 mm.) long. The facing heads will face up to 44 inches (1,118 mm.) maximum diameter. The boring bar is a steel forging. It has six reversible power-geared feeds as well as hand and power rapid traverse in either direction. A smooth, steady feed which is very necessary when boring the interrupted ports of piston valves, is obtained by means of a screw. The feeds are engaged, disengaged and reversed by conveniently placed levers. The outer boring bar bearing is adjustable for different lengths of cylinders. The facing heads are clamped to long revolving sleeves and when not in use may be loosened and allowed to hang stationary. They have in-and-out adjustment and automatic feeds by means of star engaging with properly located pin. The tool slides have a cross-motion for adjusting the depth of cut. The table has power and hand vertical adjustment as well as cross and longitudinal motion, so that both piston and valve chambers may be machined without resetting the work. The table is carried on a platen, to which it may be clamped. The platen extends between the housings and is bolted to four screws of large diameter. Means are provided for adjusting the table for alignment. Drive is by direct-connected motor of 3 to 1 speed variation. The work table may be furnished with power rapid traverse from a small constant-speed motor. Boring heads of various sizes to meet requirements may be provided.

NEW WESTINGHOUSE MOTOR.

The Westinghouse Electric & Mfg. Company has perfected an alternating-current squirrel-cage elevator motor of new design. The special features of this motor are great mechanical strength, quiet operation, extreme reliability and the excellent performance characteristics. It requires only a simple switch without resistance, and is started by being thrown directly on the line. It starts with high torque, so that the car is quickly but smoothly accelerated, but only a moderate starting current is drawn from the line. The frame is built of steel laminations, securely mounted between rolled steel end shields and supported by a rolled steel foot. This construction provides very great strength with great compactness, so that the motor is readily mounted on the elevator machine. The shaft and bearings are very large, the bearings are protected from dust, and the stator coils are moisture proof and can withstand a high degree of temperature. The rotor is practically indestructible. The end rings are cast solid on the bars, and the insulation is inorganic and will withstand a high degree of heat, moisture and mechanical stress. No solder, screws or bolts are used. There is, therefore, nothing to burn out, deteriorate under heat or work loose. The rotor is comparatively long and of small diameter, which gives a small flywheel effect. This, together with the perfect balance and the rigid construction, makes this rotor



New Westinghouse Elevator Motor

especially adapted for the frequent starting, stopping and reversing required of motors in elevator service. Quiet operation is assured by testing each motor for noise in a soundproof room. These motors are made in sizes of from 3 to 20 h.p. for 2 and 3 phase, 25 and 60 cycle circuits of 220, 440 and 550 volts.

HE STRUCK A MATCH.

He struck a match as he passed through,
The glorious growth of centuries;
He lit his pipe—and then he threw
The tiny blaze among the trees.
It flickered, seemed to die away—
And he, all careless, passed along,
Filled with the pleasure of the day,
The glory of the Forest's song.

Furious wild-driven by the gale
That roared as Hell is thought to roar,
The forest fire swept hill and vale,
Claiming its victims by the score.
Huge flame-tongues covered every place
That even seemed to offer hope,
And devastation smote Earth's face:
No power, save God's, with this could cope.

Black are the hills where stood the trees
That graced them so short time ago;
No more their green boughs to the breeze
Sing gently, waving to and fro;
Black are the stumps and dry the rills
That yesterday so joyous went;
But blackest is it that these ills
Are suffered by the innocent!

—*Carroll Wright.*

THE THING TO DO.

(*From Pearson's Magazine.*)

"Now the thing to do," says the eminent Parrottawk, editorial writer on the Daily Smudge, "is to increase the productivity of our agriculture, thus bringing down the cost of living."

Well, we are increasing the production all right, if that's all we want. Last year the farm products of the United States went far beyond all records and reached in value the astonishing total of ten billion dollars, a billion dollars more than in 1909, and twice as much as in 1899.

And still the cost of living rose.

"The thing to do," says Mr. Jim Hill, president of a network of western railroads, "is to increase the number of our farms. Back to the land, my hearties; back to the land—along our lines, of course."

Well, we have been going back to the land. In three years the number of farms has increased 11 per cent.

But the cost of living has increased 16 per cent.

"The thing to do," said Professor Wilson, when making his campaign speeches, now famous in song and story, "the thing to do is to reduce the Tariff and put things on the free list and then watch the cost of living come down."

Well, we have reduced the Tariff according to the Professor's own formulas and we have put things on the free list. Beef, for instance. And in two months under the new Tariff that the Professor framed, we imported 18,000,000 pounds of fresh beef and the price of beef did not come down a fraction of a cent, but only rose and rose. The Beef Trust, which owns a large part of the imported supplies, merely brought in the cheap beef free and sold it at the American prices and raked off additional profits.

Meantime the cost of living continues to soar.

What's the answer?

NOTE: We commend the above to the attention of our Canadian High Cost of Living Commission in the earnest hope that they have been able to discover some brand new causes for our Canadian malady.

Administrator's Sale

Tenders will be received by THE TITLE AND TRUST COMPANY up to and including the fifteenth day of August, A.D. 1914, for the purchase of two thousand nine hundred and ninety-five fully paid up shares of the ordinary stock of the Ontario Sewer Pipe Company, Limited.

Five per cent. of the amount of Tender must accompany the Tender, and a further payment of twenty per cent. on acceptance of offer and execution of contract to purchase in form satisfactory to the Vendor's Solicitors, the balance to be paid on closing the sale within ten days thereafter.

If desired by the purchaser, arrangements may be made for the postponement of payment of a reasonable portion of the purchase money secured to the satisfaction of the Vendors.

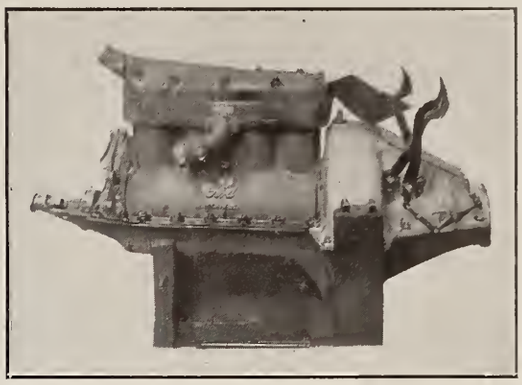
The highest Tender not necessarily accepted.

Further particulars as to the location of the Company's business and operations may be had on application to

THE TITLE AND TRUST COMPANY,
Administrators, 61 Yonge Street

or to

MESSRS. JOHNSTON, McKAY, DODS & GRANT,
Solicitors for the Administrators.



Photograph of the 500,000th Motor built by the Ford Motor Co.

BIG GAIN IN CANADA'S EXPORTS, BUT IMPORTS SHOW SHRINKAGE.

The trade figures of the Dominion for the twelve months ending April 30 show an increase of $17,000,000. The great feature is the increase in the exports by $74,000,000, while the imports decreased by $57,000,000. The customs duties consequently fell off by $10,500,000.

The large increase in exports will be taken as an indication that Canada's agricultural and manufacturing industries are becoming established on a sound and healthy basis. The exports of agricultural products increased from 155 to 193 millions, and manufactures from 44 to 58 millions.

Foundation work is in progress on the Students' Residence in connection with the University of Alberta, which is being erected at an estimated cost of nearly $200,000.



A cartoon from "American Economist" which might also apply to Canadian conditions.

FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of July, 1914.

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

Canadian Pacific Railway.

C.R.C.	R.R. No.	Effective.	Description.
Sup. 27 E 2713	Sup. 27 E 2330	June 19-14	Commodities Sault Ste. Marie, Ont., to Ottawa and Montreal. Reduction.
Sup. 9 E 2482	Sup. 9 E 2082	July 1-14	Class rates between C.P. stations. New rates.
Sup. 9 E 2549	Sup. 9 E 2156	July 1-14	Import freight, Quebec to C.P. stations. New rates.
E 2811 cancels E 1973 2017	E 2436 cancels E 1566 E 1613	Aug. 1-14	Class and commodity rates Detroit to points in Canada. Advance. Reduction.
Sup. 12 E 2541	Sup. 12 E 2147	July 1-14	Import freight, Montreal to C.P. stations. Reduction.
Sup. 10 E 1322	Sup. 10 E 904	July 1-14	Iron commodities, Toronto, Hamilton, London, etc., to C.P. stations. Reduction.
Sup. 30 E 2359	Sup. 30 E 1959	July 4-14	Paper commodities between C.P. stations. Reduction.
Sup. 30 E 2713	Sup. 30 E 2330	July 1-14	Commodities between C.P. stations. Reduction.
Sup. 2 E 2447	Sup. 2 E 2047	July 1-14	Metallic shingles and siding, Galt, Preston and Toronto to C.P. stations. Reduction.
Sup. 21 W 1428	Sup. 21 W 2141	June 19-14	Sugar and syrup, Vancouver to points east. Reissue. Reduction.
Sup. 19 W 1915	Sup. 19 W 3101	Various dates.	Commodities between Western line stations. Reissue. New rates.
W 1940 cancels W 1924	W 3181 cancels W 3126	July 1-14	Hides, c.l., stations in Manitoba, Sask. and Alta., to London, Ont. Reissue. New rates.
Sup. 10 W 1919	Sup. 10 W 3111	June 23-14	Switching and interswitching. Reissue. New rates.
W 1920 cancels W 1797	W 3115 cancels W 2850	June 25-14	Commodities, C.P. and C.N. western line stations to points in Eastern Canada. Reisssue. New rates.
Sup. 7 W 1873	Sup. 7 W 3013	Various dates.	Class and commodity rates between C.P. and C.N. and G.T.P. stations. Reissue. New rates.
W 1941 cancels W 1745	W 3182 cancels W 2717	July 1-14	Live stock, c.l., mileage rates, Canmore and East. Reduction.
Sup. 8 W 1881	Sup. 8 W 3030	June 28-14	Commodities C.P. Western lines to Oriental ports of call (export). Reissue. New rates.
Sup. 42 W 1720	Sup 42 W 2650	July 1-14	Class and commodity rates between Winnipeg, Brandon, Portage la Prairie and stations west. New rates.
Sup. 8 W 1626	Sup. 8 W 2475	June 29-14	Sugar and syrup, Vancouver to points on Can. Nor. Ry. Reissue. New rates.
Sup. 20 W 1915	Sup. 20 W 3101	Various dates	Commodities between C.P. western line stations.
Sup. 12 W 1879	Sup. 12 W 3026	Various dates.	Class and commodity rates between Winnipeg, Portage la Prairie, Brandon and B.C. Coast points. Reissue. New rates.
Sup. 18 W 1854	Sup. 18 W 2975	July 1-14	Class and commodity rates, Port Arthur and Fort William to points west. Reissue. New rates.
Sup. 21 W 1915	Sup. 21 W 3101	Various dates.	Commodities between Western line stations. Reissue. New rates.
Sup. 11 W 1919	Sup. 11 W 3111	July 1-14	Switching and interswitching. Reissue. New rates.
Sup. 29 W 1615	Sup. 29 W 2443	July 1-14	Lumber, shingles, etc., Coast and interior mills to points in Eastern Canada. Reissue. New rates.
Sup. 5 W 1827	Sup. 5 W 2907	Aug. 1-14	Commodities, stations on C.P., G.T.P. and C.N. to points in U.S. Reissue. Reduction.
Sup. 29 W 1806	Sup. 29 W 2866	July 13-14	Lumber and shingles, Coast and interior mills to points on C.P., G.T.P. and C.N. Reissue. New rates.
Sup. 22 W 1915	Sup. 22 W 3101	Various dates	Commodities between Western line stations. Reissue. New rates.
Sup. 9 W 1881	Sup. 9 W 3030	July 9-14	Commodities, C.P. western lines to ports of call in the Orient. Reissue. New rates.
Sup. 23 W 1915	Sup. 23 W 3101	Various dates.	Commodities between Western line stations. Reissue. New rates.
Sup. 12 W 1919	Sup. 12 W 3111	July 10-14	Switching and interswitching. Reissue. New rates.
E 2826	E 2452	July 4-14	Agricultural implements, c.l., Paris, Ont., to China, Japan, etc., $1.03 per 100 lbs. Reduction.
Sup. 1 E 2753	Sup. 1 E 2374	July 7-14	Agricultural implements, c.l., Brantford, Chatham, etc., to Vladivostock, Siberia, $1.00 per 100 lbs. Toronto Ex., U.S. points, 92c. per 100 lbs.
E 2827	E 2454	July 10-14	Tank and steel structural material, iron or steel, c.l., Sarnia, Ont., to Prince Rupert, B.C., 70c. per 100 lbs. Reduction.

Cincinnati, Hamilton and Dayton Ry.

Sup. 14 276	Sup. 14 5603 A	July 25-14	Commodities, C., H. & D. stations to points in Canada.

Michigan Central Railroad.

2152 cancels 1123 1430	9539 cancels 7314 7937	Aug. 1-14	Class rates M.C. stations in Canada to points on C.P. and G. P. & H. Railways. Reduction. Advance.

Is your lighting system as effective, as economically arranged as it might be? Hydro Engineers are ready to advise on both your light and power problems.

MUCH money can be wasted on inefficient lighting. Not only with regard to the current wasted and the inefficiency of the lamps themselves, but in relation to the position of the lamps and the work or workmen to be served with the light.

In the struggle for efficiency which now-a-days largely turns on the lowering of costs, no point is too small to be overlooked if there is a chance of improvement. Factory or shop lighting is certainly a biggish expense and it is reasonable to suppose that our experts could give you advice which will save you money or increase the value of the lighting you are now paying for.

Why not call us in? Now is a good time, well in advance of the Autumn, when you may be busy with other matters. Our engineers report to you, entirely without cost or obligation. We are at the other end of your telephone wire.

The Toronto Hydro-Electric System

226 YONGE ST. PHONE ADEL. 2120

Railway Facilities

ARE naturally one of the features which a MANUFACTURER must take into consideration, in deciding as to the location of new plants in new territories.

WESTERN CANADA

Is another feature that demands the attention of MANUFACTURERS at the present time, owing to the extensive settlement that has taken place and is taking place at the present time. In considering the locating of plants in Western Canada, MANUFACTURERS should not overlook

REGINA— SASKATCHEWAN'S CAPITAL

The city of Regina is served by twelve branch lines of railway, and bonds have been guaranteed for many additional railway lines which will further enhance REGINA'S reputation as a

COMMERCIAL CENTRE

This city has grown from 15,500 in 1910 to a city of 50,000 at the present time, and the industrial development has kept pace with the city's growth.

SPECIAL SITES AND TERMS

In the city's industrial area, which adjoins the main business section of the city, and is served by spur tracks from the three transcontinental railway lines, can be arranged for good industrial concerns desirous of locating at Regina.

Accurate railway map of Saskatchewan, will be mailed on request.

For further information as to Regina's industrial opportunities write

Industrial Commissioner
REGINA, SASKATCHEWAN

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

125. **Knitted Goods.**—A Newfoundland commission agent is prepared to handle sweaters, sweater coats and other knitted goods.

126. **Bottles.**—A Newfoundland general agent wishes to hear from Canadian manufacturers of bottles, especially soda water bottles.

128. **Furniture.**—A general merchant in Newfoundland is desirous of getting in touch with manufacturers of furniture in Eastern Canada.

129. **Wood Asbestos Fibre.**—A Manchester firm manufacturing asbestos and other insulating material wishes to receive quotations c.i.f. Manchester for waste asbestos fibre in lots of two or three tons per shipment.

130. **Dowels.**—A London firm who are buyers of dowels wishes to get into touch with Canadian manufacturers who can quote for their requirements.

131. **Paper.**—A gentleman in Bogota, Colombia, having a large warehouse of printing paper, desires to enter into correspondence with Canadian houses manufacturing printing papers. He asks for the names of manufacturers of printing papers, together with samples of white paper for periodicals and colored, with prices, conditions of payment, etc., packets must not exceed 100 kilometres gross.

132. **School Furniture.**—A Newfoundland firm asks to be put in touch with Canadian manufacturers of school furniture.

133. **Agricultural Implements.** — Canadian manufacturers are asked to correspond with a Newfoundland agent.

134. **Roofing Felt.** — A Newfoundland commission agent inquires for manufacturers of roofing felt, building paper, wall board, steel metal and other building materials.

135. **Roofing Felts.**—Canadian manufacturers are asked to correspond with a Newfoundland wholesale commission merchant.

136. **Kraft Wrapping Paper.**—A London firm have an important inquiry for Kraft wrapping paper for shipment to New Zealand, and invite samples and quotations from Canadian manufacturers who can offer supplies for prompt shipment.

137. **Wrought Iron Gas Tubes and Fittings.**—Inquiry is received from clients in New Zealand for the names of Canadian manufacturers of wrought iron gas tubes and fittings.

138. **Dowels.**—A Liverpool firm of timber merchants asks to be placed in communication with Canadian manufacturers of dowels.

139. **Glassware.**—Catalogues and prices are requested on Canadian glassware by a Barbados house.

140. **Duck.**—A South African importer makes inquiry for Canadian samples and prices of Canadian-made duck for tentmaking.

141. **Dairy Machinery.**—Inquiry is made by a South African importer for catalogues with prices f. o. b. Canadian ports, on Canadian-made dairy machinery and accessories.

142. **Furniture, Household.**—A South African importer makes inquiry for medium-priced household furniture to be packed in a knock-down state. Catalogues and f. o. b. prices are requested.

143. **Furniture, Office.**—A South African importer asks for catalogues and f. o. b. prices on Canadian-made office furniture.

144. **Handles.**—A South African importer asks for catalogues with f. o. b. prices on Canadian-made handles of all kinds.

145. **Machinery, Agricultural.**—Inquiry is made for catalogues with f. o. b. prices on Canadian-made agricultural machinery.

146. **Machines, Washing.**—A South African importer asks for catalogues and f. o. b. prices on Canadian-made washing machines.

147. **Paints and Oils.**—Inquiries are made by a South African importer for catalogues and f. o. b. prices on Canadian paints and oils.

148. **Paper, Wrapping.**—Samples and prices are asked for by a South African importer.

149. **Paper Bags.**—A South African importer asks for samples and prices on Canadian bags.

150. **Stepladders.**—Inquiry is made by a South African firm for catalogues and f.o.b. prices on Canadian-made stepladders.

151. **Woodenware.**—A South African importer makes inquiry for catalogues and f.o.b. prices on Canadian-made woodenware.

152. **Overalls.**—Several South African importers are prepared to consider quotations on overalls; samples of cloth and illustrations requested. Prices must be f.o.b. Montreal or St. John.

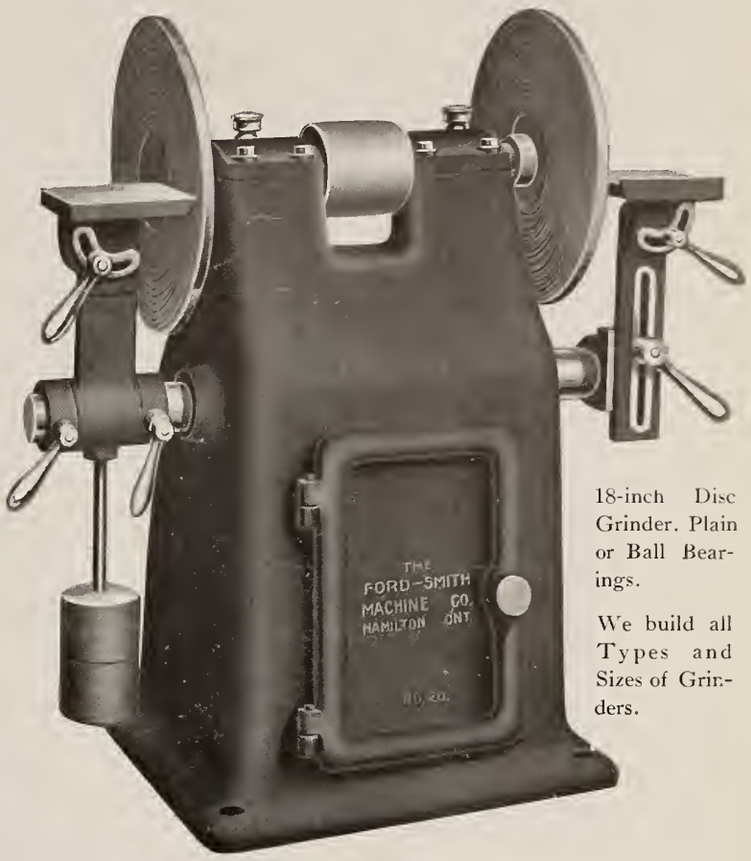
153. **Shirts.**—Several South African importers are prepared to consider quotations on working shirts, Oxford cloths, blue and black striped denims. Samples of cloth and illustrations of shirts required. Prices must be f.o.b. Montreal or St. John.

154. **Underwear, Fleeced.**—Several South African importers are prepared to consider samples of Canadian fleeced underwear. Prices must be f.o.b. Montreal or St. John. Samples and illustrations requested.

155. **Duck.**—A South African importer asks for samples and prices on Canadian duck for tent making.

156. **Furniture, Household.**—Inquiry is made by a South African importer for catalogues and prices on medium-priced Canadian furniture to be packed in knock-down state.

QUALITY GRINDERS



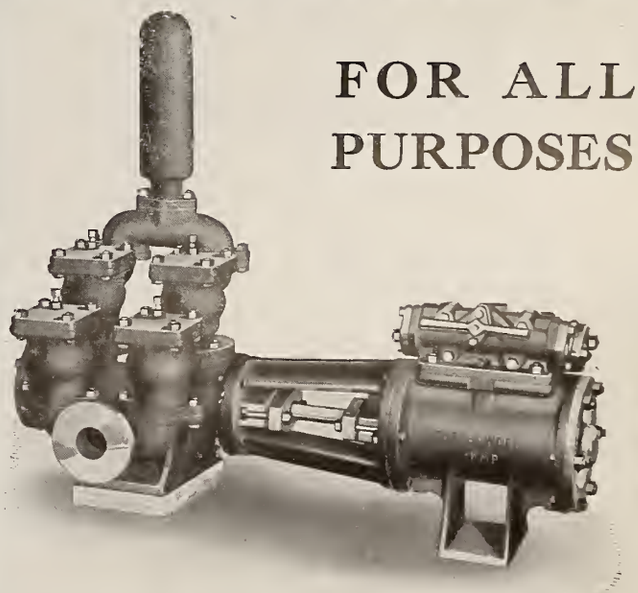
18-inch Disc Grinder. Plain or Ball Bearings.

We build all Types and Sizes of Grinders.

THE FORD-SMITH MACHINE COMPANY LIMITED
HAMILTON - - CANADA

BAWDEN PUMPS

FOR ALL PURPOSES



Cannot Short Stroke, Never Need Adjusting, no Springs, Tappets or Packing in Steam End, no Bang at any Speed or Pressure, all Faces Machined.

The Bawden Machine Co., Limited
133 Sterling Road TORONTO, CANADA

157. **Furniture, Office.**—Illustrated catalogues with f.o.b. prices are inquired for by a South African importer, on Canadian-made office furniture.

158. **Stoves.**—A South African importer asks for catalogues and f.o.b. prices on Canadian stoves.

159. **Hardware.**—A South African importer is prepared to consider quotations on Canadian hardware. Catalogues requested.

160. **Machinery, Agricultural.**—Inquiry is made by a South African importer for catalogues and prices on Canadian-made agricultural machinery.

161. **Paints and Oils.**—A South African importer asks to be put in touch with Canadian manufacturers and exporters of paints and oils.

162. **Woodenware.**—Inquiry is made by a South African importer for catalogues and f.o.b. prices.

163. **Lumber.**—A Liverpool firm inquires for white pine and poplar.

164. **Lumber.**—A Liverpool firm inquires for Douglas fir, white pine and spruce.

165. **Lumber.**—A Bootle firm inquires for Douglas fir.

166. **Lumber.**—A Birmingham firm would consider quotations on spruce, hemlock deals, battens and boards.

167. **Carriage Parts.**—Inquiry is made by a South African importer for f.o.b. prices on Canadian-made carriage parts.

168. **Machinery, Dairy.**—A South African importer makes inquiry for catalogues with f.o.b. prices on Canadian dairy machinery.

169. **Implements, Dairy.**—Inquiry is made by a South African importer for catalogues with f.o.b. prices for Canadian dairy implements.

170. **Household Hardware.**—A South African importer would like to get in touch with Canadian manufacturers and exporters of household hardware.

171. **Shovels.**—Catalogues with f.o.b. prices are asked for by a South African importer.

172. **Axes.**—A South African importer asks for catalogues with f.o.b. prices.

173. **Asbestos.**—A manufacturer in Paris requires to import fairly large quantities of asbestos and wants to discuss terms with producers.

174. **Lumber.**—A Glasgow merchant desires to correspond with reliable lumbermen in Canada with a view to doing business.

175. **Lumber.**—Some Scotch timber brokers are open to handle British Columbia lumber.

176. **Timber.**—A Glasgow firm is open to purchase ash, hickory and maple in log and sawn to sizes.

THE BEST YET

The kind that give no trouble.

"Morrow" Set and Cap Screws

"Morrow" Twist Drills

"Morrow" Semi-Finished Nuts

"Morrow" A.L.A.M. Castle Nuts

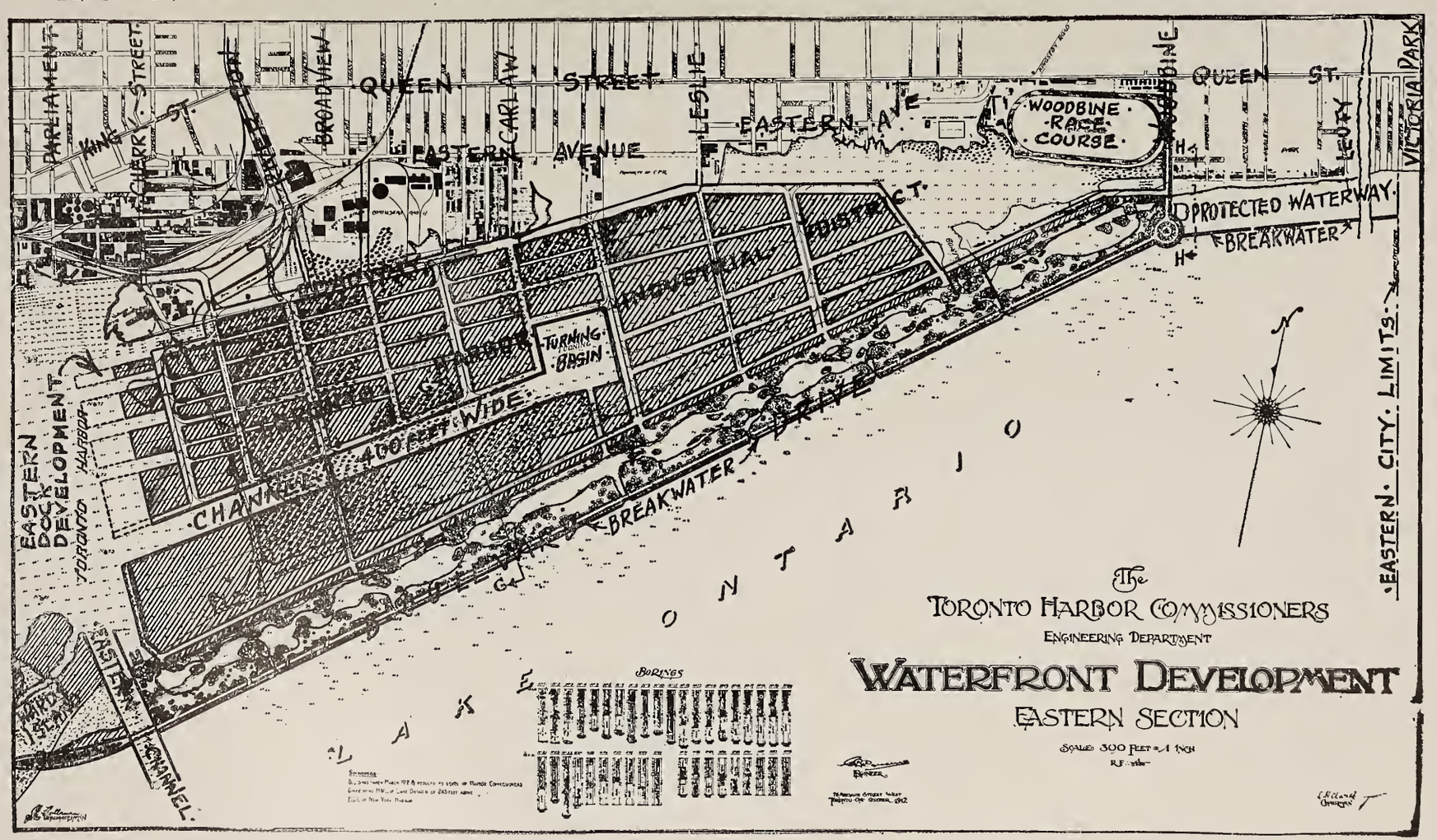


Manufactured at Ingersoll, Ontario

BY THE

John Morrow Screw & Nut Co., Limited

This "HOME FOR 1000 FACTORIES" is within 20 Minutes' Walk from the Heart of Toronto



THREE RAILWAYS FREE SIDINGS FREE INTERSWITCHING

ASK THE TORONTO HARBOR COMMISSIONERS

ALEX. C. LEWIS, Secretary 50 BAY ST., TORONTO

When writing advertisers, please mention INDUSTRIAL CANADA.

177. **Birdseye Maple Veneers.**—Prominent firm in Hamburg, Germany, importing foreign cabinet and furniture woods, desires to hear from a responsible Canadian mill able to undertake large contracts for absolutely first quality birdseye maple veneers, rotary cut, (1-30″) one-thirtieth of an inch thick. Highest financial standing.

178. **Broom Handles.**—A London firm prepared to contract for supplies of broom handles (basswood, poplar, spruce and whitewood) in quantity, asks to be placed in correspondence with Canadian manufacturers who can quote for their requirements.

179. **Timber.**—An Exeter firm desires to be put in touch with exporters of Quebec birch timber.

180. **Carriage Wheels and Parts.**—A firm in Glasgow is desirous of getting in touch with manufacturers of carriage wheels, rims, hubs, spokes, etc.

181. **Tool Handles.**—A Scotch firm of miners' tool manufacturers is open to purchase hickory handles for picks—"Scotch" pattern, "Acme" pattern, "Universal" pattern.

182. **Tool Handles.**—A firm of Glasgow wholesale tool merchants desires to get in touch with Canadian firms in a position to export hardware, also all classes of tool handles.

183. **Tool Handles.**—A Glasgow wholesale and export house of engineering specialties and small tools is anxious to get in touch with Canadian manufacturers of tool handles. They feel that a good business can be done if quality and prices are right.

184. **Tool Handles.**—A Scotch firm doing a wholesale and export business, desires connections with Canadian manufacturers of tool handles, all sorts.

185. **Tool Handles.**—Some Glasgow importers would like to hear from Canadian manufacturers.

186. **Breakfast Foods.**—A South African importer requests correspondence on Canadian breakfast foods.

NOTICE

To Manufacturers, Dealers and Users of Steam Boilers.

ALL boilers built in, or entering the Province of Ontario, and boilers exchanged or extensively repaired are subject to Government inspection as prescribed in the Steam Boiler Act.

All communications should be addressed to The Steam Boiler Branch, Department of Public Works, Parliament Buildings, Toronto.

HON. J. O. REAUME, Minister of Public Works.

D. M. MEDCALF, Chief Inspector of Steam Boilers.

187. **Brushware.**—Catalogues with f.o.b. prices are asked for by a South African firm.

188. **Butchers' Supplies.**—A South African importer would like to get in touch with Canadian manufacturers and exporters of butchers' supplies.

WORKMEN'S GOGGLES.

An effort to secure the proper goggle for workmen subject to the intense glare of incandescent metals has been undertaken by the F. W. King Optical Co., Cleveland, Ohio. It has been found that the smoked and blue glasses commonly used defeat their very purpose of minimizing eye strain. Two kinds of light rays are regarded as particularly injurious to the eyes, the chemical or ultra violet rays, which have a deteriorating action on the tissues, and the heat or red rays which by their intense energy are probably the chief cause of eye fatigue. Smoked or blue glasses offer no resistance to the former, it is claimed, and are therefore of no benefit except to exclude much of the glare; while red, orange and similar glasses transmit the very harmful heat rays. In order to make the ideal goggle, it is held to be necessary first to cut off the invisible violet rays and then reduce the visible spectrum so as to absorb heat or energy rays to a point that produces no eye strain whatever. Of all the colors, a yellow-green seems best to accomplish this. It not only reduces the light to the limits desired, but it also distorts images less than any other. Moreover, the variation of brightness of incandescent metals with temperature appears relatively the same through this kind of glass as through uncolored glass.—*Canadian Machinery.*

THE BUSINESS MAN AND THE LABORER.

There are a good many parts to a ship. Some look bigger and more important than others. At first sight the steel-plated hulk rising majestically above the water seems to be the whole ship—but—it is not!

Tucked away somewhere—in the pilot house—is the real ship—the steering wheel—the ship's intelligence, without which the huge monster would flounder to certain destruction even in the calmest sea.

There are a good many parts to a business. Some look bigger and more important than others. At first sight the immense factory where the artisans are at work seems to be the whole business—but—it is not!

Tucked away somewhere—in a few small rooms—is the real business—the pilot wheel—the guiding intelligence, without which the business would perish.

Labor takes into account only the man who does the work—it deems of no importance the man who does the thinking—the man who creates the work. It would build a ship without a steering wheel—to flounder about in an industrial sea of which it holds no chart. A legislative blow that cripples the steering wheel—automatically dooms the ship.—*Public Ledger (Phila.).*

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.

SHEETS TUBES COPPER & BRASS AND RODS

SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT

115-121 SUMACH STREET - - - TORONTO, CANADA

Get the Fire Before it Gets Your Plant

BY INSTALLING

Manufacturers' Automatic Sprinklers



You will be guarding against disastrous fires and the consequences.

Insurance companies reduce rates about 80 per cent. on all plants protected by these Sprinklers, because they know that a fire rarely gets any headway with these efficient firemen on the job night and day.

WRITE US FOR ESTIMATES on EQUIPPING your OLD and NEW PLANT. Do it now, lest you forget.

THE GENERAL FIRE EQUIPMENT COMPANY LIMITED

72 QUEEN ST. EAST TORONTO, CANADA



Canadian Plant

Chicago Bridge & Iron Works

Bridgeburg, Ontario

ELEVATED STEEL TANKS AND STANDPIPES

For Municipal, Railroad and Factory Service

We also build Oil Tanks, Coaling Stations, Bridges, Turntables, Buildings and Structural Material. Write for illustrated Catalogue No. 25.

OFFICES:

BRIDGEBURG, ONT. Can. 121 Janet St
Chicago, Ill. 1316 W 105th St.

SHOPS:

BRIDGEBURG, ONTARIO
Greenville, Pa (Pittsburg District)
Chicago, Illinois

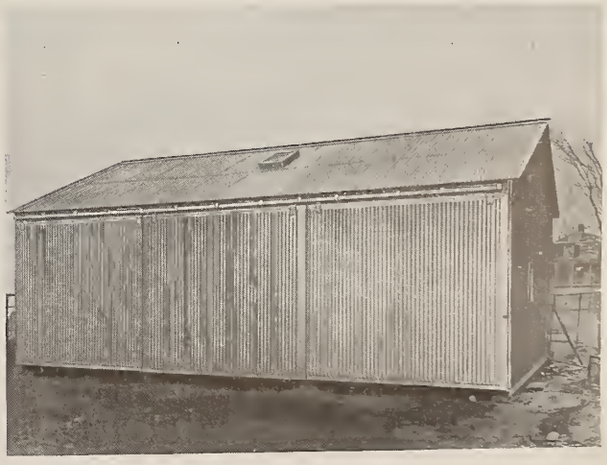
WALL PLASTER

that will be a PROTECTION is what you require for your new building. The "EMPIRE" brand not only fulfills the functions of an ordinary wall plaster by keeping out the cold. It does more. Being a Gypsum plaster it is incombustible, and forms a perfect protection for steel construction—the plaster that lasts longer than the material it covers.

Write for Specification Booklet

MANITOBA GYPSUM CO., LIMITED
WINNIPEG, MAN.

MANUFACTURERS' STORAGE BUILDINGS



Heavy steel frame covered with Acorn quality corrugated iron.

All cut and ready to put together at our factory. Two men can erect a building in a few hours' time.

If you need fireproof storage space, send for our booklet "Ready-made Buildings."

THE METAL SHINGLE & SIDING CO., Ltd.
PRESTON, ONTARIO

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has been greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Redcliff, Alta.

That the business and industrial depression has reached its lowest level and is now moving upward to normal conditions is made evident by the increasing number of orders received by factories here this week.

The Redcliff Brick and Coal Co. has just received orders for 1,250,000 common, face and hollow block for the Provincial Asylum at Ponoka, Alberta.

Another order received this week is for 550,000 pressed brick for the Dominion Armory at Edmonton.

Other orders amounting to 5,000,000 brick await a final signing up, and altogether there is sufficient work ahead to keep this plant going to capacity with a force of 175 to 200 men the balance of the year.

The Redcliff Pressed Brick Co. is shipping about fifteen cars weekly, filling orders for a new hospital at Medicine Hat, business blocks at Irvine and Warner, Alta., and Weyburn, Sask.

The Redcliff Clay Products Co. is shipping a dozen cars per week for schools and business blocks at Swift Current, and also supplying the brick for a number of local structures.

The Imperial Brass Manufacturing Company, of Chicago, has closed a contract for a factory at Redcliff, and will commence construction at once. The buildings will be similar in equipment to the Chicago plant, will be built of brick, and the plant will be in operation before winter sets in. The main building will be 40 x 150, and employ at the start 50 men. The product will be brass and hardware specialties, pumps, valves, faucets, self-heating flatirons, etc.

The headquarters of the H. Kelly Heating and Plumbing Company, of Calgary, is to be moved to Redcliff at once. This company employs 150 men, and now has some of the largest heating and plumbing contracts in the Provinces.

BRITISH COLUMBIA.

Burnaby, B.C.

For some time an iron and steel manufacturing company has been anxious to secure a suitable location in this locality with a view to setting up an industry in the near future. The matter is at present receiving consideration by the secretary of the local Board of Trade.

Westbridge, B.C.

A sawmill will be erected about thirty miles from Greenwood by the White Pine Lumber Co., of Spokane, U.S.A.

Victoria, B.C.

Plans are prepared in connection with the contemplated construction of six $250,000 stores on Fort and Government Streets for Heisterman, Foreman and Company.

MANITOBA.

St. Boniface, Man.

Dents Packing Co., Limited, of Winnipeg, bought four acres and are building abattoirs and plant in St. Boniface at Union Stock Yards this summer at a cost of $60,000 to $70,000.

Winnipeg, Man.

W. R. Pickup, of W. R. Pickup and Company, Limited, Norwich, England, earthenware manufacturers, stated that if the raw material suitable for the manufacture of fireclay goods could be found in sufficient quantities near Winnipeg they would in every possibility establish a manufacturing branch there.

NEW BRUNSWICK.

Gibson, N.B.

Concrete Builders, Limited, have a movement on foot to establish a plant for the manufacture of concrete blocks, bricks, etc., here. Machinery has already been purchased, and it is their aim to inaugurate a concrete brick manufacturing plant which will compare favorably with similar plants in other parts of the Dominion.

St. John, N.B.

T. S. Simms & Co., Ltd., manufacturers of brushes, report that business conditions were fair with them during the spring. They made gains in Ontario, Quebec and the Maritime provinces which more than compensated them for the decline in western trade which followed the late financial depression. Business is well up to the normal in the Maritime Provinces, except in a few industrial centres. This firm are looking forward to an early improvement in Western conditions and expect to be fairly busy at their plant during the coming fall.

The Board of Trade has received inquiries from a brick-making firm regarding the opportunities of a plant here.

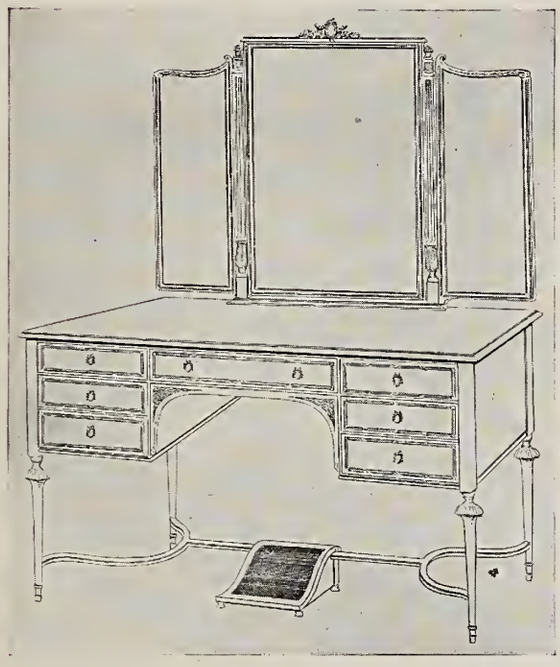
J. S. Gibbon, coal operator at St. John, is engaged in developing a new mining property at Grand Lake on the St. John river. He is laying a mile tramway to bring the product of the mine to the lake shore, so that it may be easily transhipped to St. John. The quality of the coal is said to be good.

The woodworking firm of Christie and Company have decided to enlarge their factory premises at Courtenay Bay instead of rebuilding their fire-damaged plant on City Road.

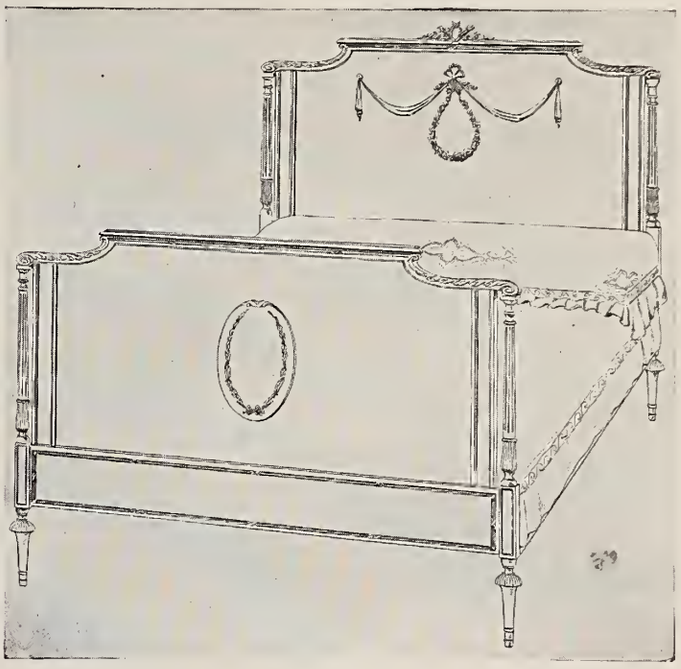
The Canada Nail and Wire Co., Limited, is the name of a new industrial concern recently established in St. John. The machinery for the mill is now being installed and in another month nails will be manufactured.

Not everyone knows that the largest sugar refinery plant in Eastern Canada is the new refinery recently erected in St. John by the Atlantic Sugar Refineries, Ltd. The building at the harbor mouth which contains this plant was only finished this spring, and ever since then the contractors for the

A New Period Design in Our Line for Fall



(LOUIS XVI)



(LOUIS XVI)

PERIOD furniture that fails to follow faithfully the design, lines, coloring and details of the original from which it is copied is in the same category as the style that's part Fifth Avenue and part Main Street, Coboconk. It's neither one thing nor the other. It's a composite or spurious composition that no one of taste either admires or desires.

We have reproduced a portion of a Louis XVI suite as an example of what we mean when we speak of purity in period styles. The pieces shown here are historically correct being copied from the originals of over a hundred years ago.

Even the medallions used in the trimmings are genuine Wedgwood imported from the famous old English pottery and are exactly the same as those used on the famous compositions of Robert and James Adam in the eighteenth century. Drawer pulls are beautiful specimens of craftsmanship, being made of antique French gilt, hand wrought, chased and carved.

The fidelity of construction exemplified in this instance is no less typical of our entire line. Anyone, no matter how unfamiliar with period styles, can purchase any piece made by us with the full assurance that it is precisely what it purports to be and that it has lost nothing in reproduction.

Look for our Shop-mark on each piece. It assures you of correct design, genuine woods, and thorough workmanship.

Our line for Fall includes several new designs which may be seen at the representative dealers in your town. We shall be glad to send you his address upon request, also a copy of our handsome booklet on the history of period furniture.

TORONTO FURNITURE CO., LIMITED

Offices and Factory: DUFFERIN ST., TORONTO

MEMBERS OF THE HOME MARKETS ASSOCIATION

LEATHER BELTING
MADE IN CANADA

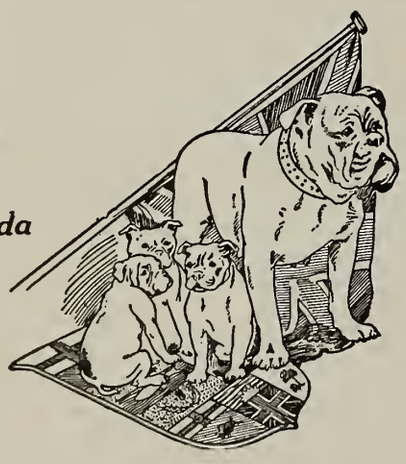
J. L. Goodhue & Company
LIMITED
DANVILLE - - QUEBEC

MANUFACTURERS OF
SUPERIOR QUALITY LEATHER
BELTING AND LACE LEATHER

Quality NOT PRICE OUR AIM

Canadian Manufacturers
SHOULD USE Canadian Belting

Made in Canada



From British Stock

"GENUINE OAK"
LEATHER BELTING
"D.K."
BALATA BELTING
Guaranteed to Give Satisfaction
D. K. McLAREN LIMITED
TORONTO MONTREAL ST. JOHN, N.B.
847 Beatty Street, VANCOUVER

engines and machinery have been busy installing machines of various kinds. All machinery is of the most modern type. Refining will be carried on on latest sanitary lines.

Westfield, N.B.

The extensive alterations and improvements being made to the sawmilling plant of the Wilson Box Company are now completed.

NOVA SCOTIA.

Halifax, N.S.

The Casino Co., Limited, which has just been incorporated with a capital of $100,000, are having plans prepared for the construction of a theatre on Gottingen Street.

Sydney, N.S.

The plant of the Dominion Steel Company is working at a maximum pressure, and, according to an announcement made a few days ago by an official of the firm, the works will be kept going night and day for the remainder of the year. At the present they have an important order for rails from the Canadian Northern Railway Company.

Berlin, Ont.

The Regal Motor Company are building a new plant.

W. G. Rumpel has completed his plant for the manufacture of fine felt for shoes. He is now installing machinery.

The Berlin Interior Hardwood Co., Limited, are building an addition to their factory.

ONTARIO.

Brantford, Ont.

An architect is to be appointed shortly to design a glue factory for the Canada Glue Company.

Brockville, Ont.

The Briggs Planing Mill Company's plant has been destroyed by fire. The loss is estimated at $20,000.

Hamilton, Ont.

L. O. Buist is contemplating an addition to ice-cream factory at an estimated cost of $10,000.

The National Paper Goods Company are contemplating the building of a new plant or addition to present one.

The erection of a pattern-storage building is contemplated by the Diamond Flint Glass Co.

A sign of returning prosperity was contained in the announcement made to-day by Basil Magor, vice-president of the National Steel Car Co., that the concern had let the contract for an extensive addition to its passenger car department. The company has secured large orders for equipment and passenger cars, which means that by the early autumn the big plant will be running day and night. In addition to the regular staff about 500 more workmen will be required.

Ross H. McMaster, of Montreal, has been elected a director of the Steel Company of Canada, Limited, to fill the vacancy created by the death of the late Senator Gibson. Mr. McMaster has been manager of the Montreal plants of the Steel



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The

Geo. B. Meadows

Wire, Iron & Brass Works Company Limited

479 West Wellington Street

Toronto

Company of Canada for some four years. He is a member of the Executive Committee of the Montreal Branch of the C.M.A. and also a member of the Council of the Montreal Board of Trade; and although one of the youngest in years, takes a leading part in the coucils of these committees.

London, Ont.

The McClary Mfg. Company have awarded contract for a $15,000 addition to their factory.

At a cost of $6,500, the London Free Press Printing Co., Limited, will build an addition to their factory.

Equipment will be required in connection with a projected extension to a glass factory for Forest City Glass Co.

Machinery is required for the $40,000 stationery factory contemplated by A. A. Langford Company.

Ottawa, Ont.

Works aggregating in cost to forty-six million dollars are being started by the Public Works Department of the Dominion Government. The undertakings consist of harbor and river works, and public buildings. Work on the four-million-dollar departmental buildings in Ottawa is likely to be delayed considerably.

Sarnia, Ont.

A $20,000 iron foundry on Clifford is being considered for Mueller Brass Works.

Sault Ste. Marie, Ont.

Extensive enlargements of the power plants on the St. Mary's River will be undertaken as the result of the decision of the International Joint Commission in the case of the Michigan Northern Power Co. and the Algoma Steel Co.

Toronto, Ont.

Messrs. James Louden & Hertzberg have had plans drawn for the erection of a planing mill at Davisville.

Windsor, Ont.

Plans are now being drawn for the warehouse to be erected by C. W. Caldwell. The estimated cost is $10,000.

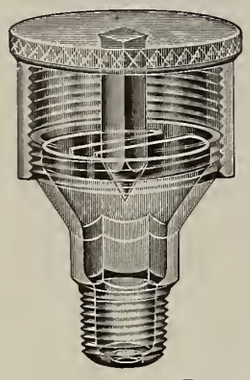
QUEBEC.

Montreal, Que.

The William Cauldwell Paper Co., Limited, of Montreal, has been reorganized as the Beveridge Paper Co., Limited. Mr. J. B. Beveridge, formerly of the New Brunswick Pulp and Paper Co., is President.

The Montreal Terra Cotta Lumber Co., has taken out new letters of incorporation and changed the style of the firm to Montreal Terra Cotta Limited. Authorized capital, $300,000. Mr. Hubert Desjardins is president.

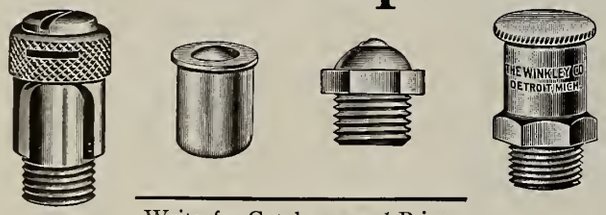
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ETC., ETC

PUMPS

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HOISTS, Etc.

Write, if interested

The Hall Engineering Works, which has carried on a flourishing machinery business in Montreal for many years, has been formed into a joint stock company as The Hall Engineering Works Limited; and will continue under the management of Mr. Thomas Hall, as formerly. The authorized capital is $200,000.

The Hamilton Shoe Co., Limited, is the latest addition to Sherbrooke's flourishing industrial community. The construction of the new factory is just commencing. Mr. J. H. Hamilton, who has been managing the factory of J. B. Blouin & Fils at Levis, is the moving spirit in the new enterprise.

Contracts will be let shortly for painting and electric work in connection with the construction of a $9,000 boiler house for the Toilet Laundry Company, Limited.

Tenders are being received by the Patterson Mfg. Co. for the erection of a factory at an estimated cost of $25,000.

The Carters Ink Co., of Cambridge, Mass., have purchased a site for the erection of a factory.

Rigaud, Que.

The Rigaud Granite Co., of Montreal, will erect a stone crusher plant at an estimated cost of $100,000. Tenders are about to be invited for cars, electric motors and general machinery.

Richmond, Que.

The Boston Last Company have plans in progress for extensions to their factory.

Rock Island, Que.

Butterfield & Co., of Derby Line, Vt., and Rock Island, Que., are building an addition to their factory at Rock Island. The new building will be 185 feet long, 60 feet wide, and three stories high, of brick and concrete construction. A portion of the new building will be used for manufacturing Twist Drills and Milling Cutters. It is hoped the factory will be in operation by January 1, 1915.

St. Johns, Que.

Contracts will be awarded shortly for the construction of a factory for Canadian Hart Accumulator Co., London, Eng

Sherbrooke, Que.

Contract has just been given to the Sherbrooke Construction Company for the construction of a machine shop on Randrill for the Sherbrooke Machinery Company, Limited.

East End, Sask.

The clay beds are now being examined here with a view to the installation of a sewer pipe factory for the American Sewer Pipe Co., Akron, Ohio.

Moose Jaw, Sask.

A site has been secured by the Moose Jaw Abattoir Company, at a cost of $60,000, for the erection of a new abattoir.

Regina, Sask.

The Campbell, Wilson and Strathdee warehouse, now under construction, is proceeding at a very rapid rate. It is estimated that the cost will be in the neighborhood of $80,000.

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BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.
ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.
ACETYLENE WELDING APPARATUS
*L'Air Liquide Society, Montreal, Que.
ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.
ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.
Hough Lithographing Co., Ltd., Toronto.
AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
AGRICULTURAL IMPLEMENTS
Tudhope-Anderson Co., Ltd., Orillia, Ont.
AIR HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.
AIR WASHERS
*The Canadian Service Co., Windsor, Ont.
ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.
ALE
E. L. Drewry, Winnipeg, Man.
ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.
AMMONIA
Canadian Ammonia Co., Ltd., Toronto.
ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.
ANIMAL REGULATORS
Pratt Food Co., of Canada, Ltd., Toronto.
ARCHITECTS
*T. Pringle & Sons, Montreal.
ASBESTOS:
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.
ASBESTOS BUILDING LUMBER
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
ASBESTOS CEMENT SHINGLES
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
ASBESTOS CORRUGATED SHEATHING
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
ASBESTOS MILLBOARD:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
ASBESTOS PRODUCTS;
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
ASBESTOS ROOFING SLATES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
ASBESTOS SHEATHING:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
ASBESTOS SHEET AND PISTON PACKINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
ASBESTOS TEXTILES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
ASBESTOS THEATRE CURTAINS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.
AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.
AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.
AUTOMATIC SPRINKLERS
*The General Fire Equipment Co., Ltd., Toronto, Ont.
AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.
AWNINGS
J. J. Turner & Sons, Peterboro, Ont.
*Smart-Woods, Ltd., Montreal.
AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.
BAGS
*Smart-Woods, Ltd., Montreal.
BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.
BAGS, jute
The Canadian Bag Co., Ltd., Montreal, Que.
BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal, Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.
BAKING JAPAN
*Berry Bros., Ltd., Winnipeg, Man.
BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.
BANK AND OFFICE RAILINGS
*The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.
BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston. Ont.
BANK RAILINGS and CAGES:
*Dennis Wire & Iron Works Co., London.
BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.
BARS, iron
London Rolling Mill Co., Ltd., London, Ont.
BARS, steel
London Rolling Mill Co., Ltd., London Ont
BASEBALL GOODS
A. J. Reach Co., Toronto.
BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.
BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Goldie & McCulloch Co., Ltd., Gadt, Ont.
*Wm. & J. G. Greey, Toronto.
BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.
BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville, Ont.
*Smart-Woods, Ltd., Montreal.
BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.
BEER
E. L. Drewry, Winnipeg, Man.
BELT FASTENERS
*Dominion Belting Co., Ltd., Hamilton, Ont.
BELTING.
*Dominion Belting Co., Ltd., Hamilton, Ont.
BELT DRESSING:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Dominion Belting Co., Ltd., Hamilton, Ont.
BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
J. L. Goodhue & Co., Danville, P.Q.
Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.
BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Goodyear Tire & Rubber Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.
BELTING (stitched cotton duck)
*Dominion Belting Co., Ltd., Hamilton, Ont.
BENT GOODS
The Crown Lumber Co., Woodstock, Ont.
BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.
BILLIARD BALLS
Samuel May & Co., Toronto.
BISCUITS
The Montreal Biscuit Co., Montreal, Que.
BLACK SHEETS:
*A. C. Leslie & Co., Montreal.
BLANK BOOKS:
*Morton, Philips & Co., Montreal.
BLANKETS
Slingsby Mfg. Co., Ltd., Brantford Ont.
BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
*Smart-Woods, Ltd., Montreal.
BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.
BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.
BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.
BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.
BOILER COMPOUND and OILS
Electric Boiler Compound Co., Ltd., Guelph, Ont.
BOILERS.
*Canadian Allis-Chalmers, Limited, Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, London, Ont
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Jenckes Machine Co., Sherbrooke.
*The Waterous Engine Works Co., Ltd., Brantford.
BOILERS, heating:
*The Goldie & McCullough Co., Ltd. Galt.
BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.
BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.
BOILERS, steam and brass work:
*The Waterous Engine Works Co., Ltd., Brantford.
BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford
BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.
BOILER STANDS
Anthes Foundry Ltd., Toronto.
BOLSTERS
*Canadian Car & Foundry Co., Ltd. Montreal, Que.
BOLTS:
*The National Acme Mfg Co., Montreal.
BOLT CUTTERS:
*Canada Machinery Corporation. Galt.
BOLTS AND NUTS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth, N.S.
BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.
BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co. Ltd., Stratford, Ont.
BOOKLETS
Stone Limited, Toronto.
R. G. McLean, Toronto.
BOOKS, blank
*The Brown Bros., Ltd., Toronto.
BOOTS AND SHOES,
Ames-Holden-McCready, Ltd., Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

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Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.
Samuel May & Co., Toronto.

BOXES, cellular board:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
G. & J. Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAIDS AND NOVELTIES:
The Moulton Mfg. Co., 236 Craig St. E., Montreal.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS GOODS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
*Tallman Brass & Metal Co., Hamilton.

BRASS PLATES
Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS
Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

BRICK
National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway
*Canada Foundry Co., Ltd., Toronto.
Canadian Allis-Chalmers Ltd., Toronto.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters
Geo. Booth & Son. Toronto.

BROOMS
*Boeckh Bros. Co., Ltd., Toronto.
H. W. Nelson & Co., Toronto.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:
*Boeckh Bros., Ltd., Toronto.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd. Toronto.

BUCKET TANKS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUILDING BLOCKS, vitrified, salt glazed
Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING GRANITE
McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir. Montreal, Que.

BURLAPS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE:
*Northern Electric Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:
*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS
Hough Lithographing Co., Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CALENDARS, ADVERTISING NOVELTIES, etc.
Rolph & Clark, Ltd., Toronto.

CAMERAS
Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

CANVAS
*Smart-Woods, Ltd., Montreal.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PAPER:
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

CARBON PRODUCTS
Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
Canada Carbide Co., Ltd., Montreal, Que.

CARPETS AND RUGS
Toronto Carpet Mfg Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.
*Richard-Wilcox Canadian Co., Limitd, London, Ont.

CARRIERS, box and barrel
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*Wm. & J. G. Greey, Toronto.

CARS, industrial:
*Wm. & J. G. Greey, Toronto.
*Sheldons, Ltd., Galt.

CARTONS, lithographed
Harris Lithographing Co., Toronto.

CASEMENTS, steel
*Herbert Morris Crane & Hoist Company, Ltd.

CASTINGS:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

CASTINGS, brass and bronze:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:
*Galt Malleable Iron Co., Ltd Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CAST IRON PIPE:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

CATALOGUE MAKERS
Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIN BLOCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Herbert Morris Crane & Hoist Company, Ltd.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS
J. M. Fortier, Limited, Montreal.
Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO
J. M. Fortier, Ltd., Montreal.
Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel
The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S
*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

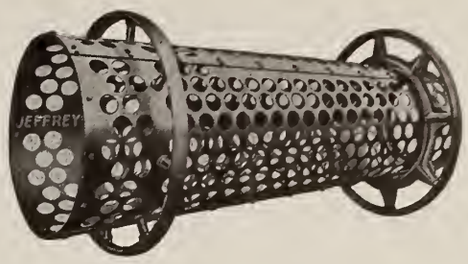
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COBALT OXIDE
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*Ths Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

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COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.

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COLLARS AND CUFFS waterproof
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Moirs, Limited, Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

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CONVEYORS:
*Dodge Mfg. Co.. Ltd.. Toronto.
*Wm. & J. G. Greey, Toronto.
*Jenckes Machine Co., Sherbrooke.

COOLING APPARATUS
*The Canadian Service Co., Ltd., Windsor, Ont.

COPPER:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS
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*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPERWARE AND LANTERNS
Sheet Metal Products Co. of Canada, Ltd., Toronto.

COPPER WIRE
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CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORK, granulated
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*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COTTON TEXTILES:
*Dominion Textile Co., Montreal.

COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.

COUPLERS, steel bar:
*Canadian Steel Foundries, Ltd., Montreal.

COUPLINGS:
*Dodge Mfg. Co.. Ltd.. Toronto.
*Wm. & J. G. Greey, Toronto.

CRANES:
*Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.

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The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

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De Laval Dairy Supply Co., Peterboro, Ont.

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*The Dominion Creosoting Co., Ltd. Vancouver, B.C.

CRUSHERS, rock.
*Canadian Allis-Chalmers, Limited, Toronto.

CRUSHING ROLLS:
*Jenckes Machine Co., Sherbrooke.

CUES
Samuel May & Co., Toronto.

CUFFS
The Standard Shirt Co.. Ltd., Montreal, Que.

CUPOLAS,
*Sheldons. Ltd.. Galt.
The Northern Crane Works, Ltd., Walkerville.

CUPS, presentation
Standard Silver Co., Toronto.

CUPS, grease and oil
*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR
Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DESIGNERS
Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.
Grip. Ltd.. Toronto.

DINING ROOM SUITES
The George McLagan Furniture Co., Limited, Stratford. Ont.

DIES
*Butterfield & Co., Rock Island, P.Q.

DISINFECTING APPARATUS
Spramotor Co., London, Ont.

DOOR HANGERS
*Canadian Allis-Chalmers, Ltd., Toronto.
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS
Daly & Morin, Montreal, Que.

DREDGES
*M. Beatty & Sons. Ltd., Welland. Ont.

DRESSING, belt
Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:
*Canada Machinery Corporation, Galt.
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

DRILLS, rock
*Canadian Allis-Chalmers, Ltd., Toronto.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:
*Canadian Billings & Spencer, Ltd., Welland.

DROP HAMMERS:
*Canada Machinery Corporation, Galt.

DRY CELLS, electric
Canadian Carbon Co., Ltd., Toronto.

DRY COLORS
P. D. Dods & Co., Ltd., Montreal, Que.
The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DRY KILN EQUIPMENT
*The Canadian Service Co., Ltd., Windsor, Ont.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.

DYERS AND FINISHERS
R. Parker & Co., Toronto.

DYNAMITE
Canadian Explosives Ltd., Montreal. Que.

DYNAMOS.
*Canadian General Electric Co., Ltd., Toronto.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN
Galt Knitting Co., Ltd., Galt.

ELECTRIC APPLIANCES.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd.. Hamilton.

ELECTRIC BATTERIES.
*Canadian General Electric Co., Ltd., Toronto.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd. Montreal, Que.

ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co.. Ltd., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.
*Canadian General Electric Co., Ltd., Toronto.
*Packard Electric Co., Ltd., Toronto.

ELECTRIC PLATE WARE
Roden Bros.. Ltd., Toronto.

ELECTRIC BATTERIES
Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING
Central Press Agency, Toronto.

ELECTRICAL SUPPLIES
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouss Co., Ltd., Hamilton.
Crouse-Hinds Co. of Canada, Toronto.
*The Canadian Fairbanks-Morss Co., Ltd., Montreal, Que.
*Jones & Moore Electric Co., Ltd., Toronto.
*Munderloh & Co., Montreal.
*Northern Electric Co., Ltd., Montreal, Que.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto.

ELEVATORS:
*Jenckes Machine Co., Sherbrooke.
Turnbull Elevator Mfg. Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.

ELEVATORS, hydraulic and elsctric
John McDougall Caledonian Iron Works Co.. Ltd., Montreal, Que.

ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMELED KITCHENWARE:
*The Davidson Mfg. Co., Ltd., Montreal.

ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.

ENGINES
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Sheldons, Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.

ENGINES, gas and gasolins
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Massey-Harris Co.. Ltd., Toronto.

ENGINES, gasoline tractor plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Limited, Montreal.

ENGINES, hoisting
*M. Beatty & Sons, Welland.
*Waterous Engine Works Co., Ltd., Brantford.

ENGINES, marins gasoline
*Canadian Fairbanks-Morse Co., Limited, Montreal.

ENGINES, steam plowing and threshing
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Sawyer-Massey Co., Ltd., Hamilton, Ont.

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Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.
Rolph & Clark, Ltd., Toronto.
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HIRAM WALKER & SONS
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Walkerville, Canada

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Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS AND CATALOGUE BUILDERS
The Esdale Press, Ltd., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote
American Bank Note Co., Ottawa, Ont.

ENGRAVING:
*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.

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Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

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Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR
Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS
Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto.

EXPLOSIVES, high
Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

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De Laval Dairy Supply Co., Ltd., Montreal, Que.
J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

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Sadler & Haworth, Montreal, Que.

FENCES and GATES:
*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire
Banwell Hoxie Wire Fence Co., Hamilton, Ont.

FENCES, iron
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

FENCING, wire
The Great West Wire Fence Co., Ltd., Winnipeg, Man.
C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:
*The E. B. Eddy Co., Ltd., Hull.

FILES
Henry Disston & Sons, Ltd., Toronto.
*The Nicholson File Co., Port Hope, Ont.

FIRE ALARM APPARATUS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE DOOR HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:
*Waterous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:
*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS
*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford.

FIRE HOSE
*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.

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*Canadian H. W. Johns-Manville Co., Toronto.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

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*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Rockwood Sprinkler Co., of Canada, Ltd., Montreal, Que.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.
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The Garth Co., Montreal, Que.

FIREPROOF WINDOWS and DOORS:
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FISH, Atlantic Sea-Foods
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FITTINGS, steam
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FLAGS
J. J. Turner & Sons, Peterboro, Ont.
*Smart-Woods, Ltd., Montreal.

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Canadian Carbon Co., Toronto.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLOUR
Leitch Bros. Flour Mills, Ltd., Oak Lake, Man

FLOUR MILL MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.

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Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
*Sheldons, Ltd., Galt.

FORGINGS
Canada Forge Co., Ltd., Welland. Ont.
*The Steel Co. of Canada, Ltd Hamilton.

FOUNDRY EPUIPMENT
The Northern Crane Works, Ltd., Walkerville.

FRICTION CLUTCH PULLEYS:
*Dodge Mfg. Co., Ltd., Toronto.

FRICTION HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

FRINGES AND TASSELS
The Moulton Mfg Co., 236 Craig St. E., Montreal.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FRUITS AND JUICES
J. J. McLaughlin, Ltd., Toronto.

FUEL
Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.

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J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air
Bedford Stove Co., Bedford, Que.

FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

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*A. C. Leslie & Co., Montreal.

GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
*The Waterous Engine Works Co., Ltd., Brantford.

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S. F. Bowser & Co., Toronto.

GASOLINE
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*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

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*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.
*International Engineering Works, Ltd., Amherst, N.S.

GENERATORS, electric
*Canadian General Electric Co., Ltd., Toronto.

GINS
The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd. Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS
A. R. Clarke & Co., Ltd., Toronto
Durham Glove Co., Ltd., Bowmanville, Ont.

GLUE
Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.

GRATES.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*International Engineering Works Ltd., Amherst, N.S.

GRAVITY CARRIERS
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Dennis Wire & Iron Works Co. London.

GRINDING WHEELS:
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London, Ont.

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The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.

GYPSUM, crushed
*Albert Mfg. Co., Hillsborough, N.B.

GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH
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HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.

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*E. Leonard & Sons, London, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

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Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston. Ont.

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ORGANS, parlour
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The Toronto Paper Mfg. Co., Cornwall, Ont.

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Stauntons, Ltd., Toronto.

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The Toronto Paper Mfg Co., Cornwall, Ont.

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*For Display Advertisement See Index, Page 1



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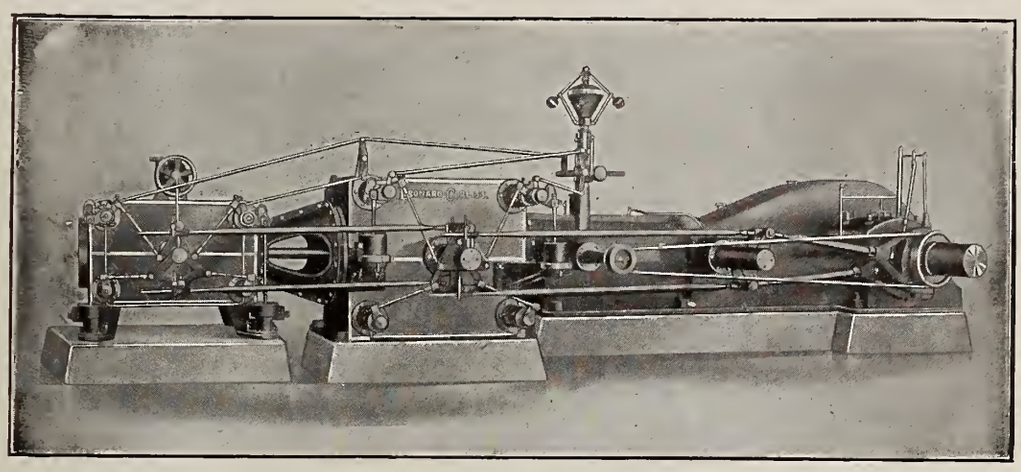
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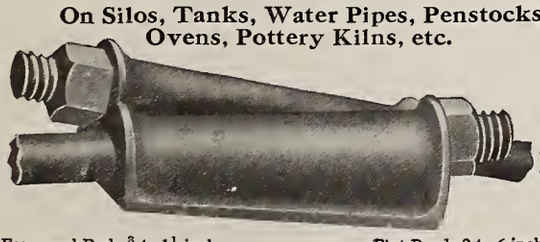
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*Gutta Percha & Rubber, Ltd.

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Ridout & Maybee, Toronto.

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*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.

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*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TOBACCO, leaf
J. M. Fortier, Ltd., Montreal.

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Brown Boggs Co., Ltd., Hamilton, Ont.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton, Ont.

TRANSMISSION MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

TROLLEYS.
The Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont.

TRUCKS
The Gurney Scale Co., Hamilton, Ont.
*Wm. & J. G. Greey, Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford.

TRUNKS
Lamontagne Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal, Que.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

TUBING, Brass and Copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Canadian Seamless Wire Co., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

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Canadian Seamless Wire Co., Toronto.

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*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*International Engineering Works, Ltd., Amherst, N.S.

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*International Engineering Works, Ltd., Amherst, N.S.

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Brantford Cordage Co., Ltd., Brantford, Ont.

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Pratt and Whitney Co., of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

TYPEWRITERS:
*United Typewriter Co., Toronto.

TYPEWRITER RIBBONS
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

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Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial
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*John T. Wilson & Co., Toronto.
*Geo. W. Reed & Co., Montreal.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

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The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

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Hamilton Cotton Co., Hamilton, Ont.

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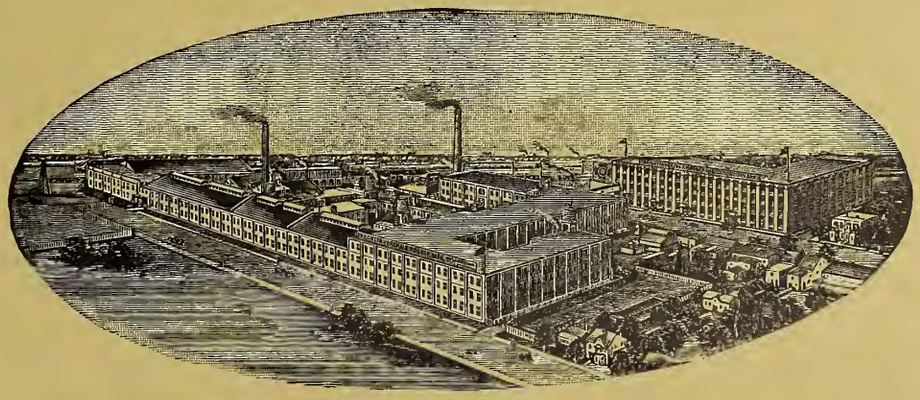
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Vol. XV., No. 2 SEPTEMBER, 1914 $2.00 per Year

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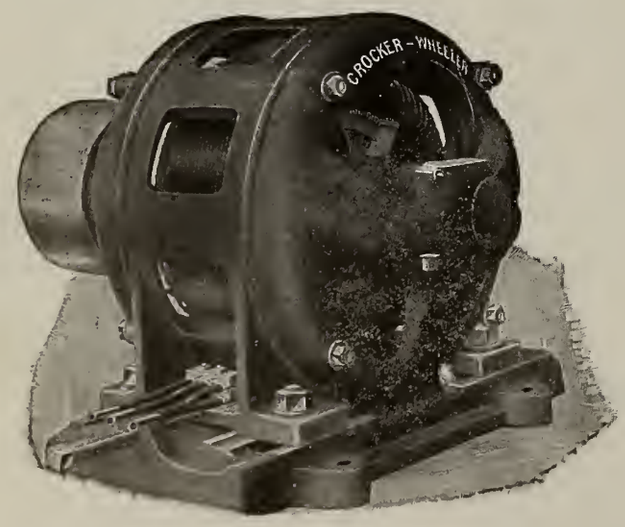
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The factories of Germany, France and Austria, which hitherto have not only supplied the needs of their own people, but the needs of many other countries throughout the world, are crippled.

To-day these countries cannot even supply their own necessities, to say nothing of the rest of the world.

The United States and Canada will have to step into the breach and supply the world's markets in conjunction with England and the other European countries whose trade is not affected by the war.

This means tremendous commercial activity throughout Canada; mills and factories will work under pressure hitherto undreamt of.

Everyone who wants to work will be able to participate in this unexpected prosperity.

Europe's misfortune is deplored by every Canadian, but it is the duty of every Canadian to stand up and get the wheels of industry in motion so that this country will be able in a measure to supply the wants of the suffering world.

The manufacturing plants of Germany, France and Austria are lying idle---the men are all at the front defending their countries. Canada's mills and factories have been working half time, but to-day there is no excuse for every enterprise of the Dominion not being manned to its fullest capacity.

Argentina, one of the great wheat producers of the world, has a very heavy crop. She was one of Germany's big customers. She must be clothed, and her wants must be supplied. She will be a heavy customer for agricultural machinery, and Canada should profit thereby.

Three million British workmen depend upon the building trade, whose raw material has come largely from Germany. That supply is now cut off, but Canada can take Germany's place. A Commissioner from London is on his way to Canada to place immense orders with the steel mills throughout the country.

Canada's steel industries will soon be working at top speed. Every other industry will be affected in the same way.

In the twinkling of an eye the dull-trade conditions of Canada will be superseded by piping prosperity.

Every man, woman, and child in the country who will work will have work aplenty and very soon too.

Predictions are made in well-informed circles that soon there will be commercial activity throughout the country never before approached.

Canadian manufacturers have not only their share of the WORLD'S Trade to look after, but they must replace the $15,000,000 worth of German merchandise that has been annually sold to the Canadian people.

Much of the merchandise sold in the big stores in Canada has come from Germany; this merchandise is perishable and the stores will soon have to be restocked.

A large item of Germany's total trade with us is made up of cotton and woolen goods. The Canadian mills and factories which have not been operating full time will have to coal up to meet the shortage.

This means a big call for labor.

And if Canada secures her share of the foreign trade it will mean additions and the erection of new mills on a large scale.

The European War, according to authorities, is likely to last a considerable time—some say two years at least, and even after the war is over it will be a long time before European industries are on a competitive basis.

The export trade that will come to Canada is likely to be permanent, necessitating extensions and developments of great magnitude.

The increased export trade will mean increased shipping for the railways and steamship companies, increased employment for the people and general activity, the proportions of which are difficult to comprehend.

[Over]

The first thought of the Canadian manufacturers should be to replace the following German goods sold to Canada last year:

Total Trade	$14,473,833
Drugs, etc.	750,000
Earthenware	343,000
Fancy Goods	1,127,000
Furs	1,600,000
Glass	256,000
Gloves	380,000
Rubber Goods	186,000
Leather	61,000
Cutlery	400,000
Machinery	300,000
Musical Instruments	200,000
Optical	200,000
Paints and Colors	230,000
Paper	280,000
Silk	300,000
Tobacco	186,000
Sugar	309,000
Jewellery	175,000
Hats and Bonnets	73,000
Electric Apparatus	111,000
Feathers and Flowers for Hats	127,000
Hops	56,600
Packages and Parcels	150,000
Ales, etc.	22,000
Baskets	23,000
Books	85,000
Boots	15,000
Breadstuffs	131,000
Brooms and Bristles	60,000
Ry. Cars and Carriages	85,000
Clocks	119,000
Cocoa and Chocolate	77,000
Combs	81,000
Pocket Books and Purses	78,000
Spirits and Wines	72,700
Lead Pencils	74,700

Cottons Imported from Germany last year $1,100,000

PRINCIPAL ITEMS

Blouses and Shirtwaists	6,775
Socks	441,898
Other Clothing	71,268
Embroideries	45,000
Dyed Fabrics	72,000
Velvets	32,000
Lace	227,000
Sheets, etc.	44,000
Thread	18,000
Yarns	78,000

Imports of Wool Products from Germany for last year, total $1,000,000

PRINCIPAL ITEMS

Carpets	60,000
Knitted Goods	104,000
Garments for Women and Children	148,000
Socks and Stockings	65,000
Underwear	246,454
Yarns	103,000

Imports of Iron Products and Minerals from Germany last year $3,000,000

PRINCIPAL ITEMS

Cutlery	400,000
Machinery	280,000
Wheels	326,000
Tools	60,000
Tubing	340,000
Zinc Products	350,435
Lamps	177,600

Which of the above commodities are you prepared to supply?

Now is your chance to secure this trade.

We have the facilities for popularizing "Made in Canada" products from coast to coast.

THE CANADIAN STREET CAR ADVERTISING COMPANY, LIMITED

Montreal ∴ Toronto ∴ Winnipeg

Gramm Moving Van





Gramm Moving Van



Owned by J. T. BURROWS, "The Mover," Brantford, Ont.

Mr. Burrows writes us as follows: "Last week we went to Oshawa, Ont., a distance of 106 miles one way, or 212 miles on our job, moving the entire household effects of a six-roomed house, well furnished, in the short space of 23 hours actual time, including loading at Oshawa. Now, I must say that I am well satisfied with the truck, and I am breaking all records for long distance movings that have ever happened in Brantford in my twenty-third year in the carting and teaming business."

Gramm Trucks are made in capacities of 1 ton, 2 tons, 3½ tons and 5 tons
EXPORT DEPT. for EXPORT BUSINESS, furnishing Catalogs in English and Spanish

The Gramm Motor Truck Co. of Canada Limited

"Truck Makers Exclusively"
WALKERVILLE, ONTARIO

Ford
THE UNIVERSAL CAR

Buyers to Share in Profits—Lower Prices on Ford Cars

Effective from August 1, 1914, to August 1, 1915, and guaranteed against any reduction during that time.

Touring Car	- - -	$590
Runabout	- - -	540
Town Car	- - -	840

F.O.B. Ford, Ont. **In the Dominion of Canada only**

FURTHER we will be able to obtain the maximum efficiency in our factory production, and the minimum cost in our purchasing and sales departments **IF** we can reach an output of 30,000 cars between the above dates.

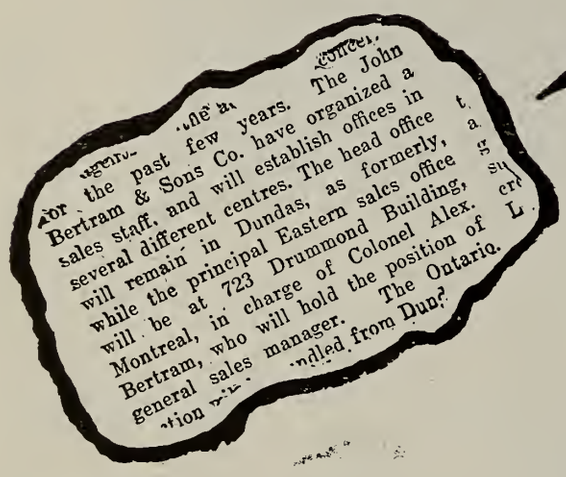
AND should we reach this production we agree to pay, as the buyer's share, from $40 to $60 per car (on or about August 1, 1915) to every retail buyer who purchases a new Ford car between August 1, 1914, and August 1, 1915.

For further particulars regarding these low prices and profit-sharing plan, see the nearest Ford Branch or Dealer.

Ford Motor Company of Canada, Limited

Ford, Ontario

What This Means to you!



BERTRAM MACHINE TOOLS

It Means :

The right to bring your Machine Tool problems to **Machine Tool experts.**

Sixty years of successful machine tool experience is behind our sales organization.

Expert advice by salesmen **who** specialize on tools alone.

Our Sales Staff sell nothing but Machine and Small Tools, and are experts at their business.

Prompt attention to your requirements.

An experienced and competent staff to handle your enquiries intelligently.

A Community of Interests.

Our success depends on your satisfaction. Our interests and yours are therefore identical.

It Means Just This :

SERVICE and a SQUARE DEAL

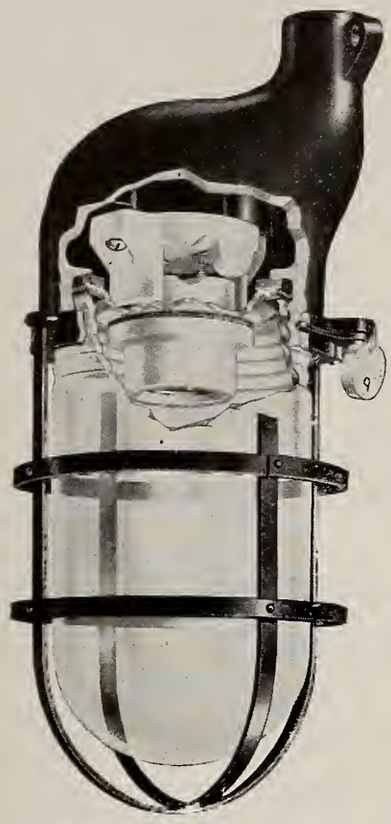
THE JOHN BERTRAM & SONS CO., Limited

Dundas, Ontario, Canada

723 Drummond Building
MONTREAL, QUE.

Bank of Hamilton Building,
WINNIPEG, MAN.

VANCOUVER, B.C.



Broken-away View showing interior.

CONDULETS

OF

V and VH Series

VAPOR, GAS AND DUST-PROOF

For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust.

These Condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Illustrations below show a few of the many forms in which these series of Condulets are made.



ORDER FROM YOUR JOBBER. IF HE DOES NOT STOCK THEM, WRITE US.

Complete and Fully Illustrated Catalog Free upon Application

CROUSE-HINDS CO. OF CANADA, LIMITED

Main Office and Works:

TORONTO, ONTARIO, CANADA

"VITAL" SPARK PLUGS



For Performance, Strength and Simplicity

Vital Spark Plugs possess all the essentials necessary to a smooth running and efficient motor

HERE ARE THE REASONS

¶ The center electrode and double sparking points are of solid nickle, so constructed that they will not wear or collect soot at the points.

¶ Ample room is provided for expansion so that they can not break from excessive motor heat, and they are thoroughly sealed against compression leaks.

¶ Extra heavy non-porous porcelain is provided so that they will not break under the use of the wrench. Vital Plugs appeal to engineers, users and dealers alike—they are cheapest in the long run.

Vital Plugs are Made at Monteal

For better service and better price to the Canadian Trade. Vital Standards are made in three sizes,—$\frac{1}{2}''$ pipe, $\frac{7}{8}''$ A.L.A.M. and Metric. Write for full information and contract prices. Literature furnished to dealers.

We carry a full line of Standard Screws, Nuts and Studs in stock and make Special Products promptly. Standard lists mailed on request and estimates furnished promptly from samples or blue prints.

THE NATIONAL-ACME MANUFACTURING CO.

MONTREAL P.Q.

IN ST. HENRI AT G.T.R.



Unharmed in the Midst of the Great Salem Fire Because Roofed With

J-M Asbestos Roofing

Flying sparks and burning embers were literally showered upon the roof of this raw cotton storehouse of the Naumkeag Steam Cotton Company, located in the midst of the recently flame-swept area of Salem, Mass.

Buildings all around it were burned to the ground, yet this building was absolutely unharmed because protected by J-M Asbestos Roofing.

The lesson to you of the great Salem fire is: Do not use wood shingles or other inflammable roofing.

Do not be deceived, by low first cost, into buying anything but J-M Asbestos Roofing—the roofing of known quality—the roofing that will not fail you should the fire test ever come—the roofing that spells economy for you because of the years of service it affords and the fact that it never requires painting nor repairing.

Comes in built-up form and in rolls. Latter easily applied by means of J-M Cleats, packed free with each roll.

The Canadian H. W. Johns-Manville Co., Limited

Toronto, Montreal **Winnipeg, Vancouver**

Ultimately

YOU will give your employees an individual place for clothes, lunch, etc., because when you investigate you'll find it will not only give them comfort but will save you money and make for better workpeople all around.

Ultimately you will give them steel lockers.

Built accurately by skilled mechanics, of the best suitable materials, in the largest plant of its kind in Canada, our lockers are all such a product should be. Ultimately they will be your choice if you investigate thoroughly.

THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON
CANADA

DENNISTEEL
UNIT-BUILT LOCKERS

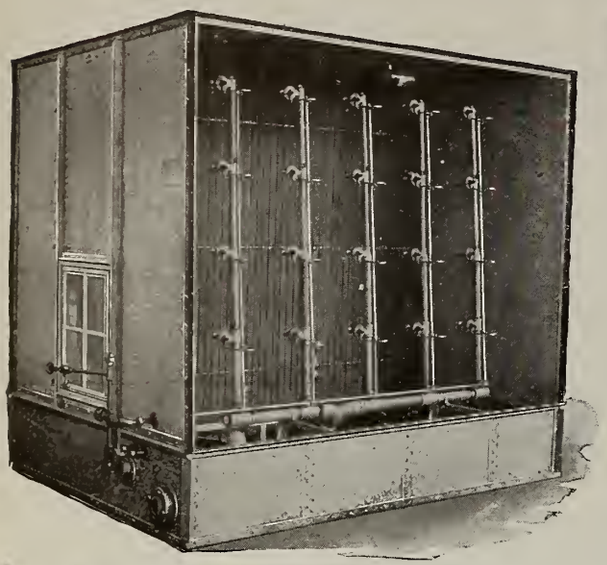
REMEMBER that when you buy a dollar's worth of goods abroad, Canada has the goods, but the **FOREIGNER HAS THE DOLLAR.** When you buy them at **home**, CANADA has **both** the **GOODS** and the **DOLLAR**



Then **why buy Drills from Europe or the U.S.** when you can buy as good or better drills, "**WILT DRILLS**" made at **HOME?** **Correctly Machined** at a single chucking from **Special Steel,** designed primarily for making high-grade Drills, and **scientifically hardened.**

WRITE FOR PRICES. ASK YOUR JOBBER

THE WILT TWIST DRILL COMPANY OF CANADA LIMITED
WALKERVILLE, ONTARIO



For Summer Cooling—

Protect your men against inefficiency from hot weather by providing for an atmospheric condition in your shop which will make it easier for them to do more and better work.

MADE IN "Sirocco" TRADE MARK CANADA

COOLING AND PURIFYING SYSTEMS

Ensure a cool and comfortable atmosphere. In hottest weather, with this system in operation, the temperature in your workrooms can be lowered from 15 to 20 per cent. *Think what this would do to hold up your production.*

The air is thoroughly cleansed of all impurities before it enters your factory—and distributed through ducts to just where you want it.

Write for Bulletin No. 2302—it tells all about Sirocco Purifying, Cooling and Humidifying Apparatus.

Clark T. Morse, 301 McGill Bldg. Montreal
E. C. Powers, 43 Victoria St. Toronto

CANADIAN Sirocco COMPANY LIMITED
WINDSOR. ONTARIO.

W. P. Eddy, 301 Tribune Bldg. Winnipeg
S. S. Clarke, 605 2nd St. Calgary

Write to us for catalogue and further information

HOPE STEEL SASH



HOPE STEEL SASH is adaptable to every type of Industrial Building. Its great strength, economy and permanence fully meet the requirements of any architect or builder for this class of work.

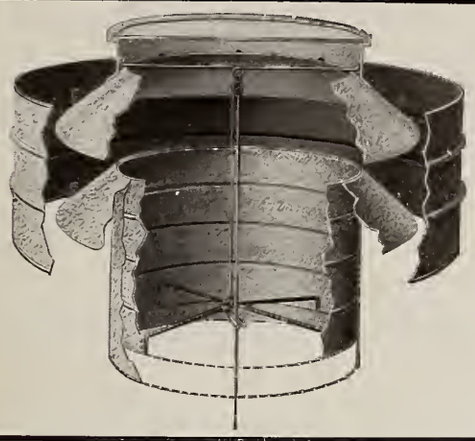
The use of HOPE SASH means not only economy, but by the admission of more daylight and better ventilation it increases efficiency and means larger output for the manufacturer. HOPE SASH requires no upkeep and the first cost is practically the only cost. The fireproof qualities of HOPE SASH reduce insurance rates, and its durability is evidenced in structures in which it has been in use for a great number of years.

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W. N. O'Neill & Co., Vancouver, B.C.
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W. T. Grose & Co., Winnipeg
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Lyons Fuel Co., Steelton, Ont.
Peart Bros., Regina
Walker & Barnes, Edmonton, Alta.
David McGill, Montreal



Perfect Ventilation

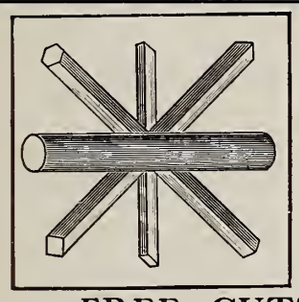
The Burt Ventilator gives you perfect ventilation, and owing to the special patented features has none of the drawbacks of ordinary systems.

Thorough ventilation of your Office, Factory, Warehouse, etc., means a higher state of efficiency on the part of your employees.

We will be glad to send you booklet explaining the Burt Ventilator.

The cut shows Burt Ventilator with glass top—but it is made with metal top, etc., to suit varying conditions.

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COLD DRAWN, TURNED AND POLISHED STEEL

SHAFTING

ROUNDS, SQUARES, HEXAGONS AND FLATS

$\frac{1}{4}$ in. to 6 in. Dia. $\frac{1}{4}$ in. to 2 in. $\frac{1}{4}$ in. to $2\frac{1}{4}$ in. up to $1\frac{1}{2}$ in. $2\frac{1}{2}$ in.

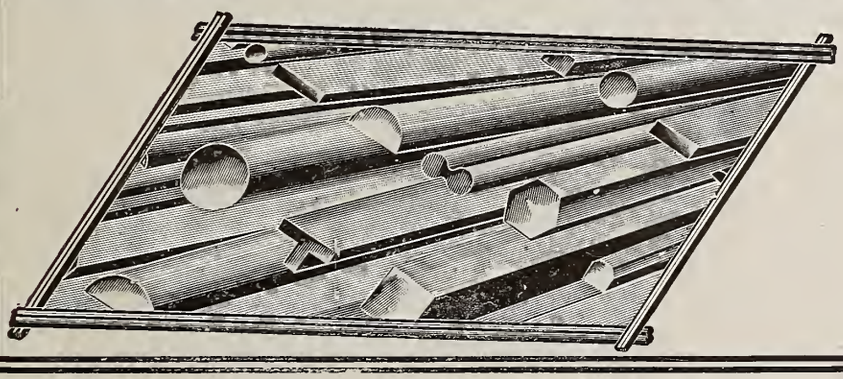
FREE CUTTING SCREW STOCK, PISTON AND PUMP RODS

The CANADIAN DRAWN STEEL CO., Limited

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Rounds, Flats, Squares and Hexagons

LARGEST STOCK IN CANADA

Get prices before ordering elsewhere.



REDUCE HANDLING EXPENSE

With an "R-W"

Overhead Carrying System

REDUCE YOUR INSURANCE

By using

"R-W" LABELLED FIRE-DOOR FIXTURES

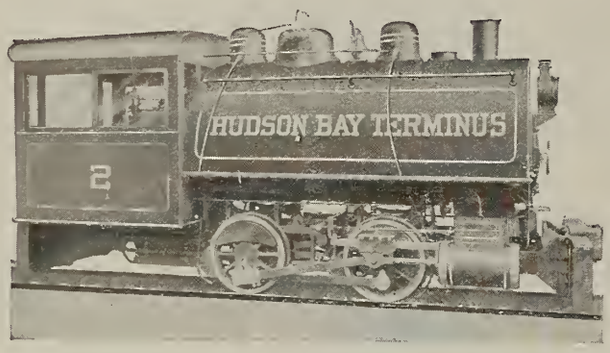
CATALOGS ON REQUEST

The ONE RIGHT WAY to hang a heavy sliding door is on R-W Trolley Hangers

Richards-Wilcox

CANADIAN COMPANY, LTD.
LONDON, ONTARIO.

INDUSTRIAL LOCOMOTIVES



AN industrial locomotive to justify its cost must start the required load and keep it going.

The right amount of the right material must be provided in the right place.

Each and every part must be sure to fit not only the locomotive for which it was made, but every other locomotive of the same size and design. Every part must be made to jigs and templets, compelling accuracy, so the machine will not be idle at a critical time for repairs or renewals. Spare parts must be instantly available, made so well as to go into place without a machine shop.

VISIT OUR WORKS AND SEE HOW ALL THIS IS ACCOMPLISHED

MONTREAL LOCOMOTIVE WORKS
LIMITED
DOMINION EXPRESS BUILDING, MONTREAL, CANADA

CANADIAN TUBE & IRON CO., LIMITED
MONTREAL, CANADA

Ask Your Jobber for

WROUGHT PIPE
BLACK AND GALVANIZED
1/8 TO 4 INCH

Thoroughly inspected and tested
to 600 lbs. pressure and branded.

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Also BOLTS, NUTS, RIVETS—All Kinds

SELLING AGENTS:

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WIRES, WIRE NAILS, WOOD SCREWS, ETC.

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LEATHER BELTING

MADE IN CANADA

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SUPERIOR QUALITY LEATHER BELTING AND LACE LEATHER

Quality NOT PRICE OUR AIM

Canadian Manufacturers SHOULD USE Canadian Belting

Made in Canada



From British Stock

"GENUINE OAK"

LEATHER BELTING

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Guaranteed to Give Satisfaction

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TORONTO MONTREAL ST. JOHN, N.B.

847 Beatty Street, VANCOUVER



Cut Down Your Light Bills With Properly Installed Reflectors



WE show here two styles of Reflectors, designed especially for use in factories and foundries.

Reflectors of this kind, used with Northern Light Mazda Lamps, cut lighting costs to the minimum and give greater lighting efficiency.

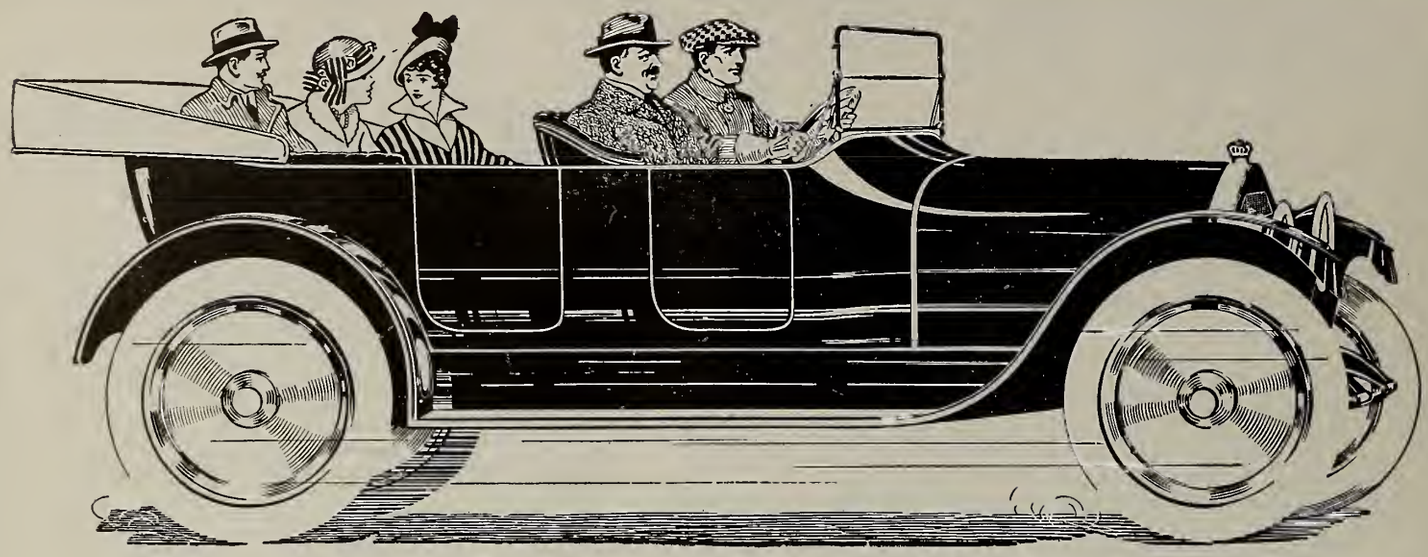
Our lighting specialist will be pleased to consult with you about equipping your plant with reflectors that give maximum illumination.

Asking the specialist at our nearest house to help solve your lighting problems places you under no obligation.

Northern Electric Company

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The New 1915 Russell Models

The New 1915 Russell-Knight

"Six-48" - Gives More
$4500
"Four-32" - Worth More
$2650 - Costs Less

WILL BE DISPLAYED FOR THE FIRST TIME IN THE TRANSPORTATION BUILDING AT THE

The New Russell "Six-30"

A Proven Car
A New Price
$1750

Canadian National Exhibition

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Northern Electric Inter-phones

Place every department at your finger-tip



OUR nearest house will send a man to study the Inter-phone requirements of your business. Write for descriptive literature.

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LIMITED

Makers of the Nation's Telephones

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Crystallized Comments on
ASBESTOSLATE ROOFING

Several thousand readers of one of Canada's leading magazines, "Everywoman's World," recently accepted an editorial invitation to tell candidly what they thought about ASBESTOSLATE---the fireproof and everlasting roofing of Asbestos and Cement. Here are a few of their interesting opinions:

"Asbestoslate Roofing is a great protection in time of fire. My father owns a number of houses and every one has an Asbestoslate Roof."
Mrs. A. S. Lucas, 399 King St. W., Brockville, Ont.

"My husband has used Asbestoslate Roofing and thinks it is alright."
Mrs. Chas. E. Hart, Madoc, Ont.

"I know of several builders who have used Asbestoslate Roofing, and it has proved most satisfactory in every way."
Mrs. J. H. Waddington, Combermere, Ont.

"I understand Asbestoslate is being used for the Dry Dock buildings here. This is a great recommendation, as the Dry Dock is to be one of the largest and best in America, and only the best materials are being used."
Mrs. J. C. Halsey, Prince Rupert, B.C.

"We have used Asbetoslate and like it splendidly." Mrs P. F. McCully, James River Sta., N.S.

"Asbestoslate Roofing is on a house we have just moved out of, and we have never known it to leak." Mrs. E. Mosher, 2 Kingswood Rd., Balmy Beach, Toronto.

Such disinterested opinions are certainly worthy of your careful consideration. Write for full information and samples of Asbestoslate to Department I.C.

ASBESTOS MANUFACTURING COMPANY, LIMITED

Address: E. T. Bank Bldg., 263 St. James St., Montreal. Factory at Lachine, P.Q. (near Montreal)

Do not fail to visit our Asbestos Bungalow at the Canadian National Exhibition, Toronto, August 29th to September 14th.

159



Which

method prevails in your plant? Are two men struggling to do the work with an old fashioned screw plate, or is one man doing it **EASILY** with one of

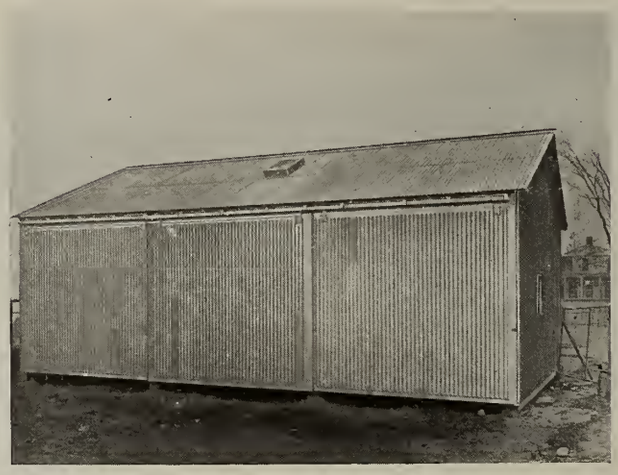
REECE'S SCREW PLATES

These pictures aren't exaggerated, they represent actual conditions in many, very many, machine shops. Dig into this proposition just a little. You'll find that costs can be lessened and production increased by just such little installations as Reece's Screw Plates.

Butterfield & Co., Inc.

Rock Island, Que.
Derby Line, Vt.

MANUFACTURERS' STORAGE BUILDINGS



Heavy steel frame covered with Acorn quality corrugated iron.

All cut and ready to put together at our factory. Two men can erect a building in a few hours' time.

If you need fireproof storage space, send for our booklet "Ready-made Buildings."

THE METAL SHINGLE & SIDING CO., Ltd.
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JULIUS COHEN & JOSEPHY

BRADFORD BERLIN TOURCOING BOSTON

FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. *Write for prices to*

H. V. ANDREWS, Canadian Representative **32 Church Street, Toronto, Canada**



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Chicago Bridge & Iron Works
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ELEVATED STEEL TANKS AND STANDPIPES

For Municipal, Railroad and Factory Service

We also build Oil Tanks, Coaling Stations, Bridges, Turntables, Buildings and Structural Material. Write for illustrated Catalogue No. 25.

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Greenville, Pa. (Pittsburg District)
Chicago, Illinois

NOTICE

To Manufacturers, Dealers and Users of Steam Boilers.

ALL boilers built in, or entering the Province of Ontario, and boilers exchanged or extensively repaired are subject to Government inspection as prescribed in the Steam Boiler Act.

All communications should be addressed to The Steam Boiler Branch, Department of Public Works, Parliament Buildings, Toronto.

HON. J. O. REAUME, Minister of Public Works. D. M. MEDCALF, Chief Inspector of Steam Boilers.

"Get Jones on the Phone"

A Factory Telephone System, worked automatically without the trouble and expense of a central operator, will keep you in close touch with "Jones," and with every other man in your factory, from the Superintendent to the Watchman.



A SWITCHBOARD WITHOUT AN OPERATOR

PRESTO-PHONE

gives you a factory telephone service that has the merits of simplicity, efficiency and economy. By pressing a lever you immediately get a connection with the department you wish.

Time is Money

YOU save money in your own time; you save money in the time of your employees; and you save money in the better service you give your customers.

Your own time? Yes. If you can keep in touch from your office with every man in your factory, every Departmental Head, every piece of work, you save the time that it would take to visit every corner of your building.

How many minutes a day are wasted in this way or in having a foreman come to you to report on his work? While he is doing that he is unproductive. And his workmen have not his supervision. An important matter, is it not?

Increases Efficiency

A house Telephone system preserves your organization. Every man is in his place. Every man is doing the work allotted to him.

And the central control is perfect. You at your desk have a closer supervision over your factory than the superintendent of the small shop has over his.

No Running Expenses

Our automatic system has no expense after the cost — a very moderate cost — of installation. There is no central operator. A child can use it.

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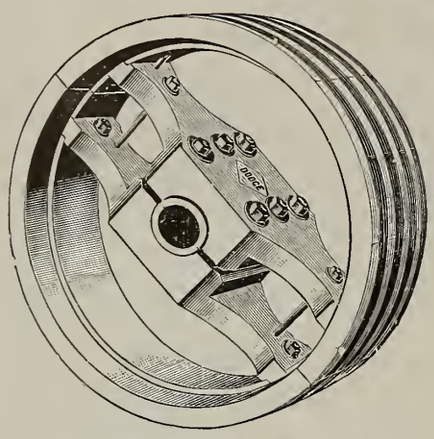
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The Verdict of an Expert After a Series of Tests Extending Over a Period of Two Years

A SERIES of Exhaustive Tests have been carried on by the Mechanical Department of Toronto University during the past two years, at the direction of Dodge Manufacturing Co., Toronto, and for the purpose of demonstrating actually and in a strictly scientific manner as to the relative values of a Wood Pulley as compared with a Metal Pulley. From the charts so far obtained we are able to say definitely that there is a ***substantial economy*** in the use of ***DODGE Wood-split Pulley*** as against any metal-rim pulley. The economy lies not only in the

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but in the actual cost of transmitting power from one shaft to another, or from shaft to machine. Furthermore, we are going to be able to show this in actual dollars and cents per thousand feet of belt travel.

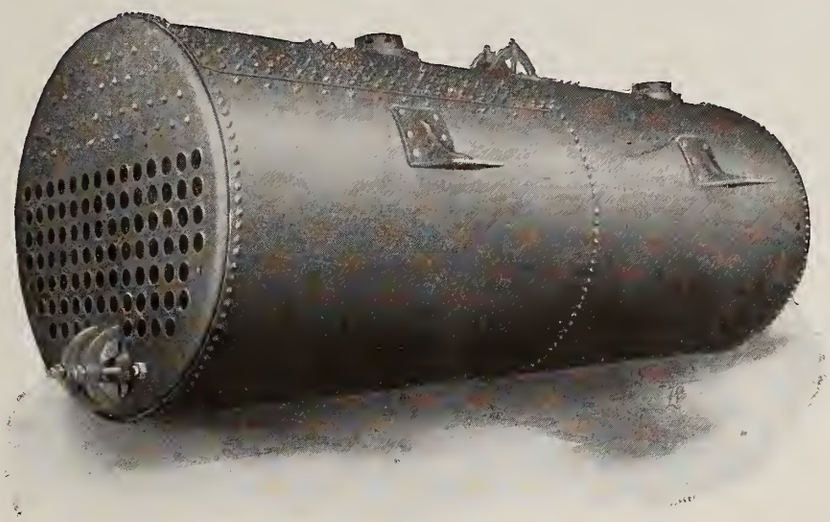
Every claim ever set forth by us for the ***Wood split-Pulley*** has been scientifically demonstrated, and the surprise is that we have been underestimating its advantages.

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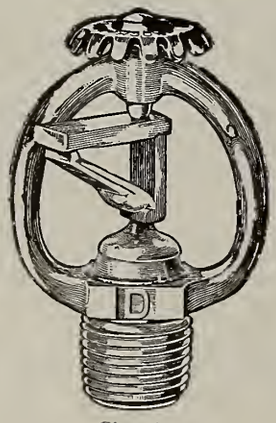
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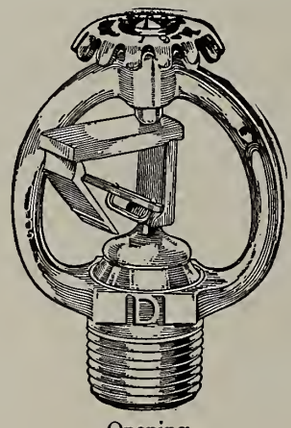


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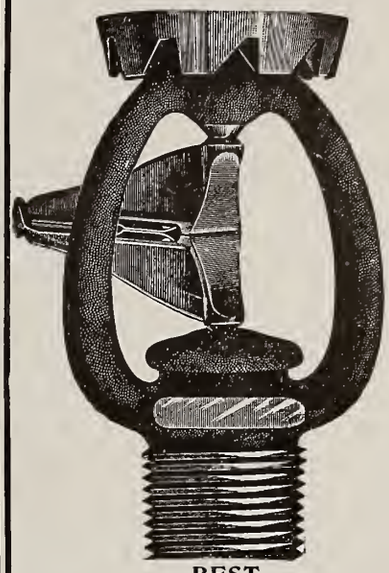


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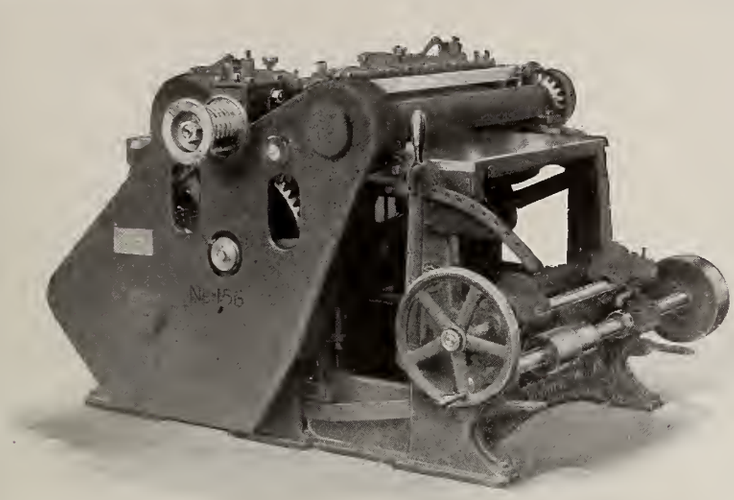
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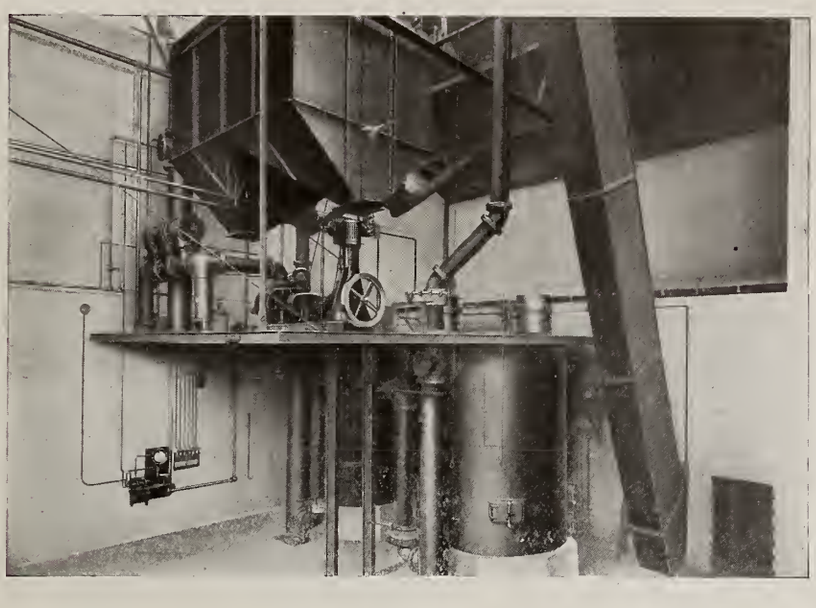
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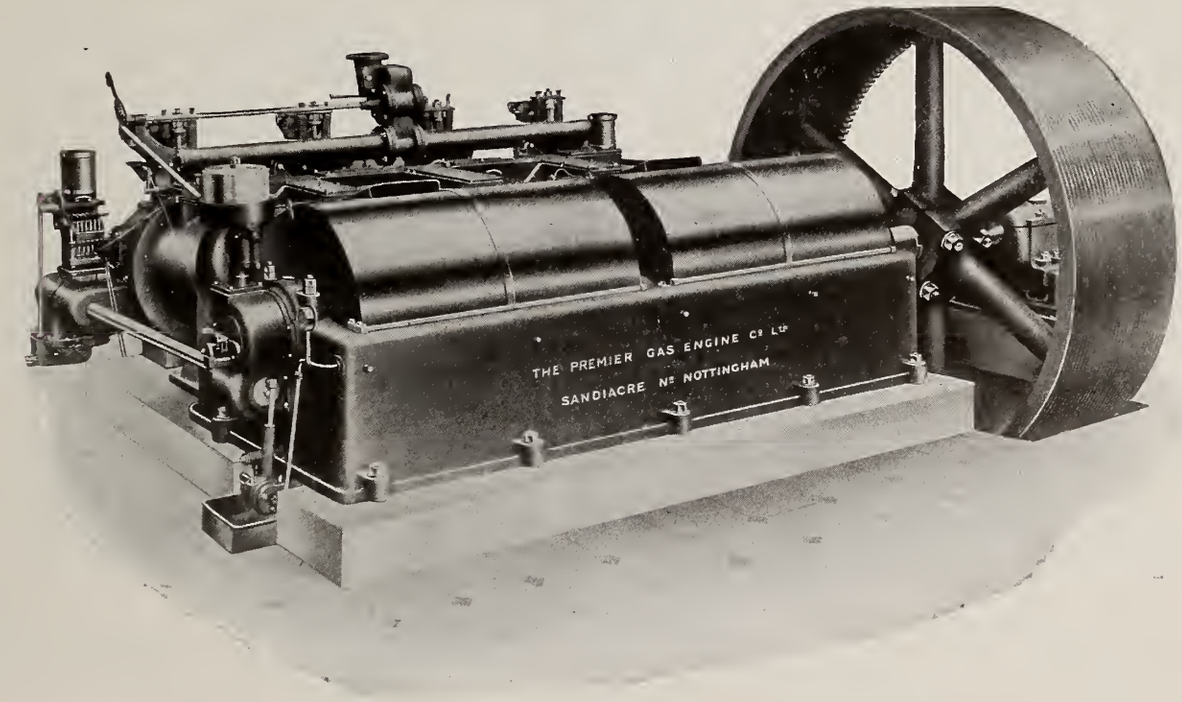
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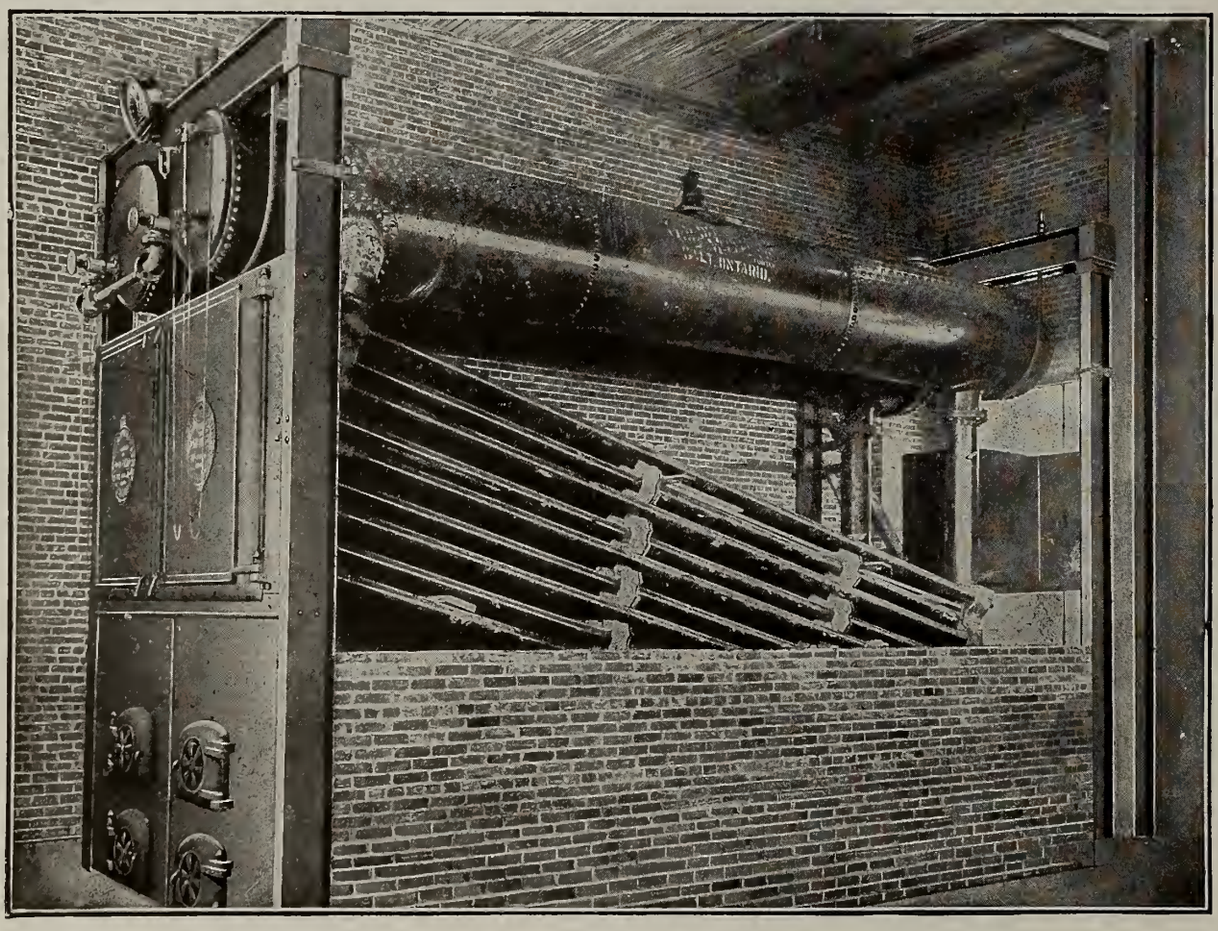


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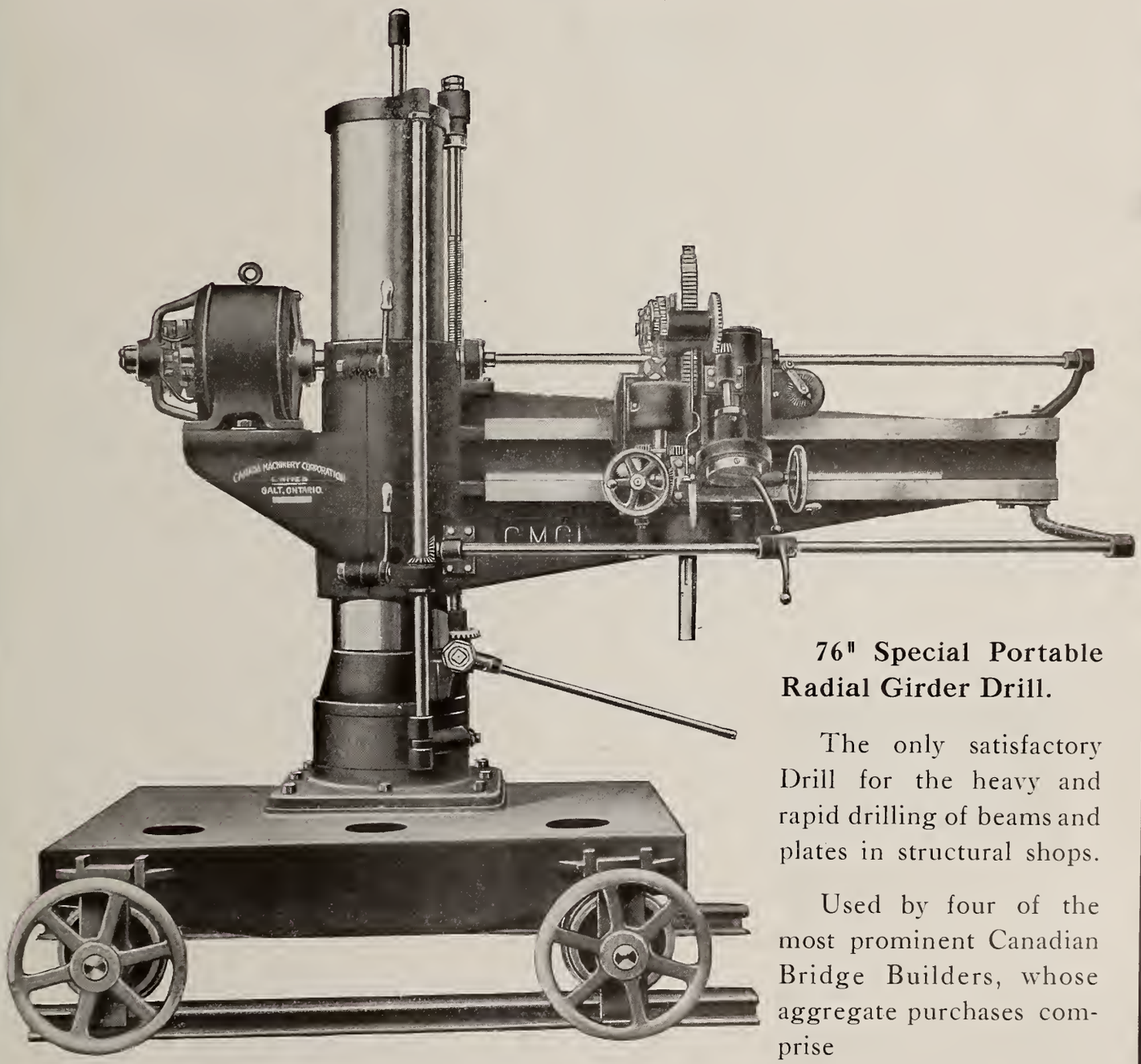
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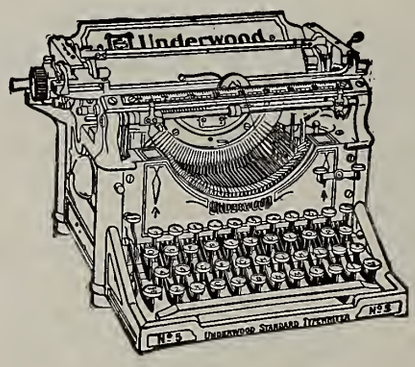
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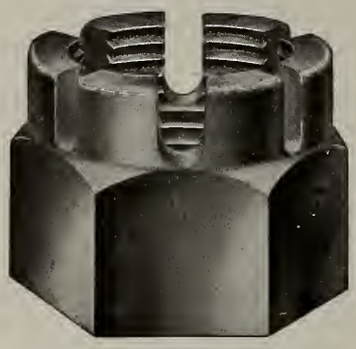
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HON. JAS. S. DUFF, Minister of Agriculture

W. C. McGHIE, Chairman of the Board

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ROBERT HUNGERFORD, Parliament Buildings, Toronto.
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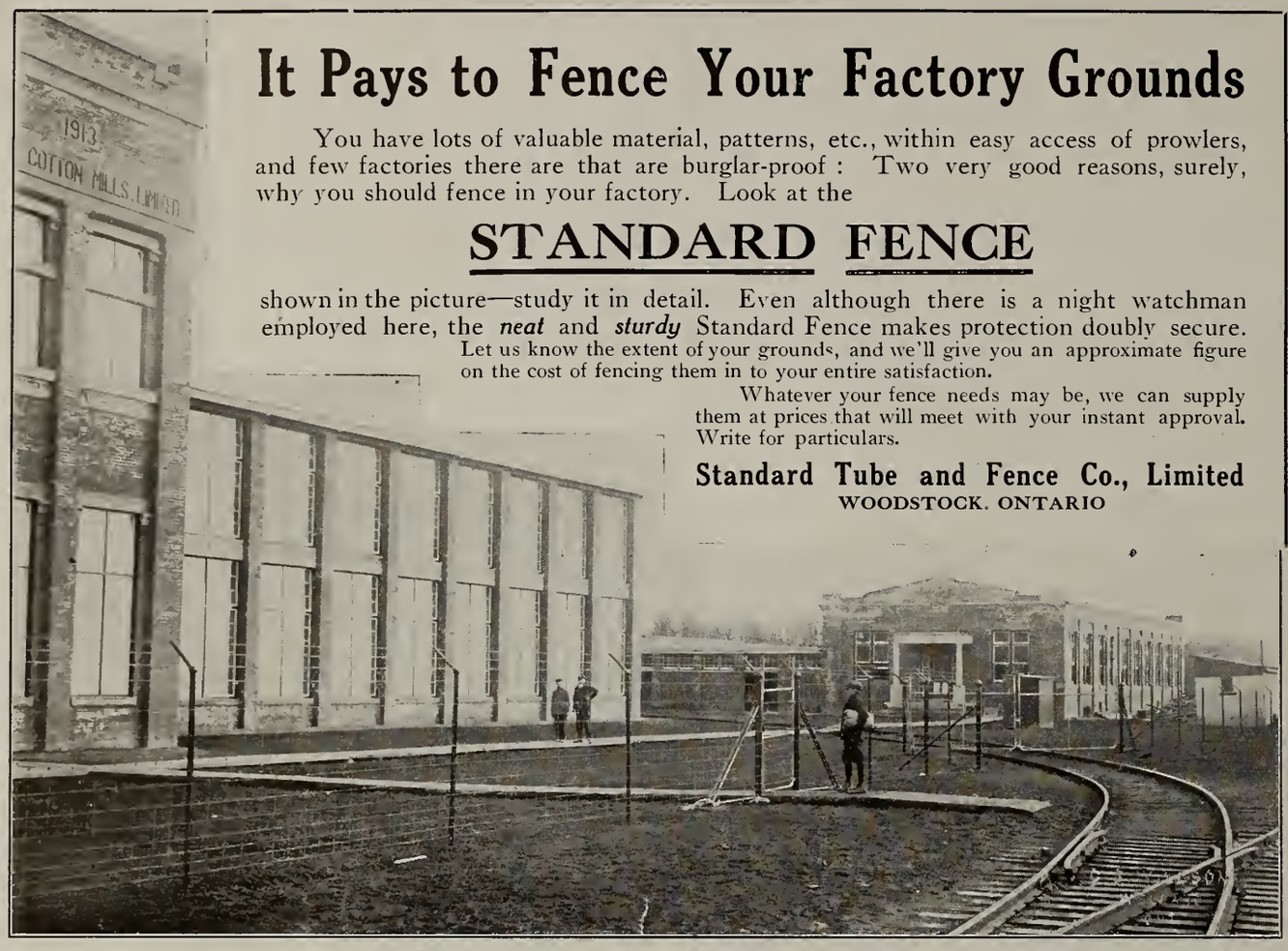
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shown in the picture—study it in detail. Even although there is a night watchman employed here, the ***neat*** and ***sturdy*** Standard Fence makes protection doubly secure.

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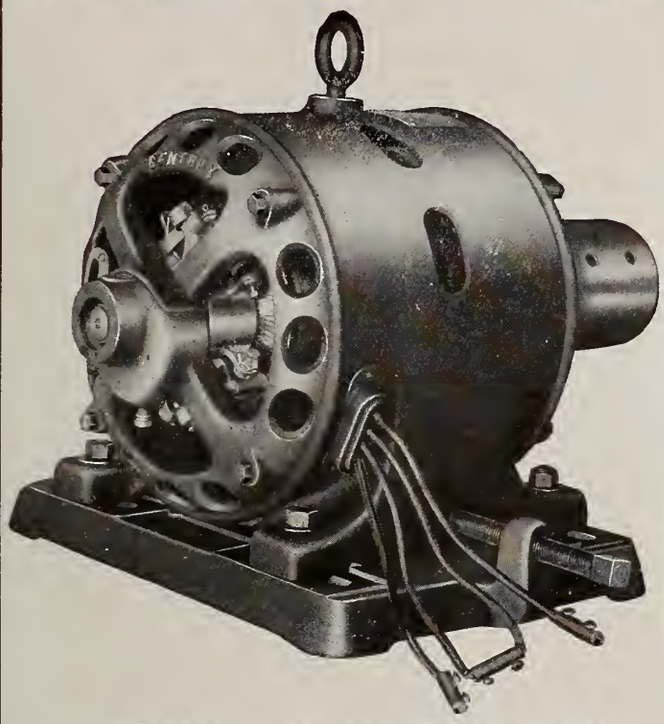
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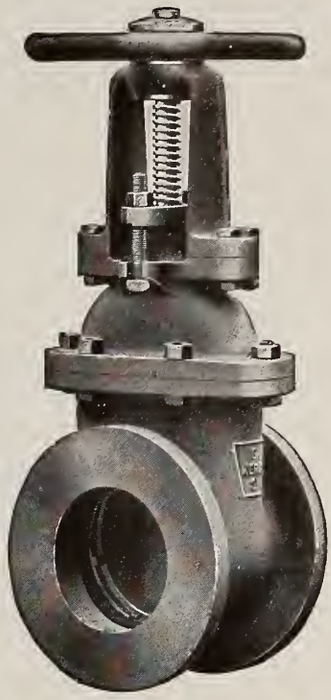
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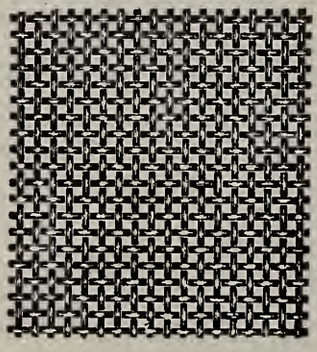
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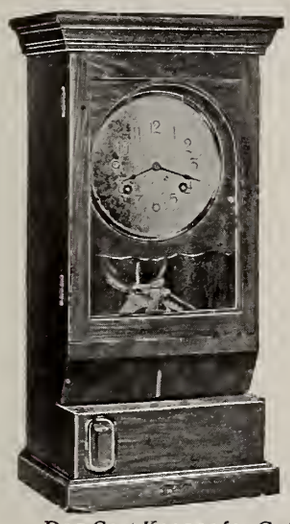
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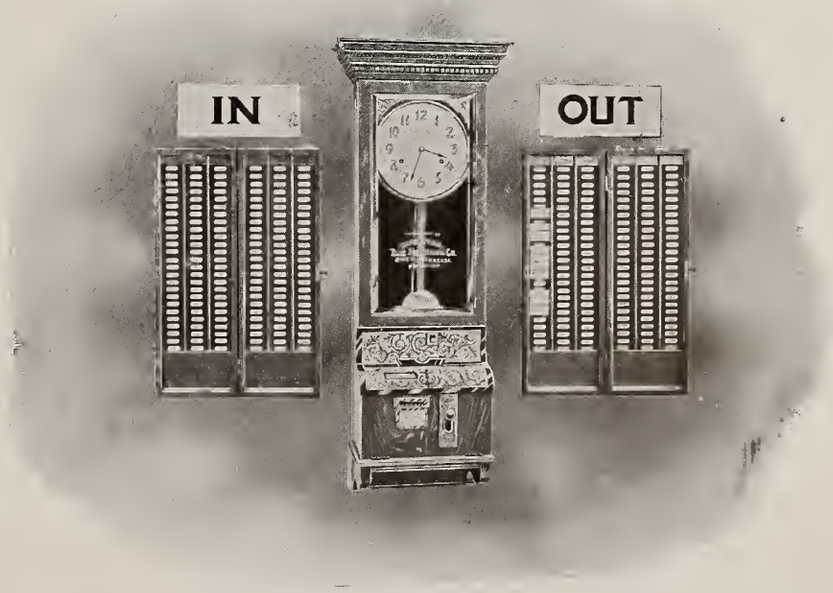
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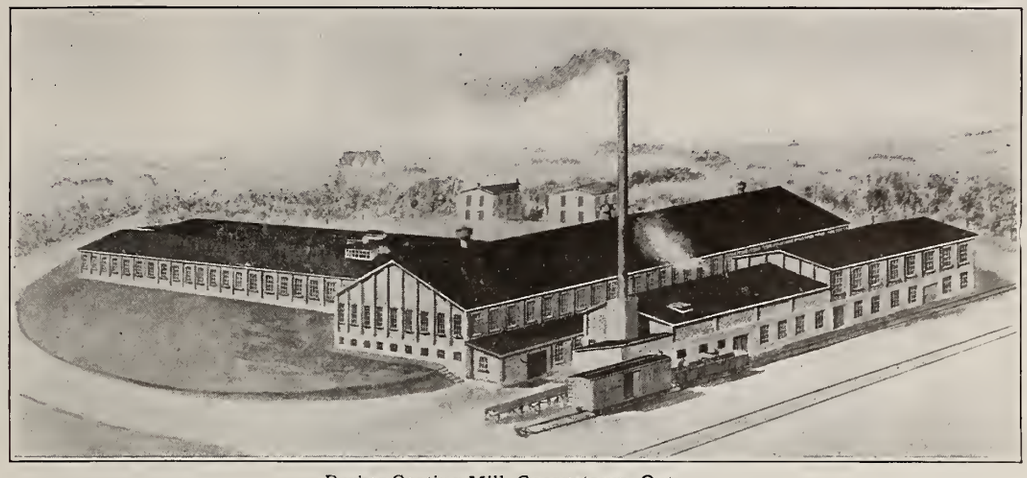


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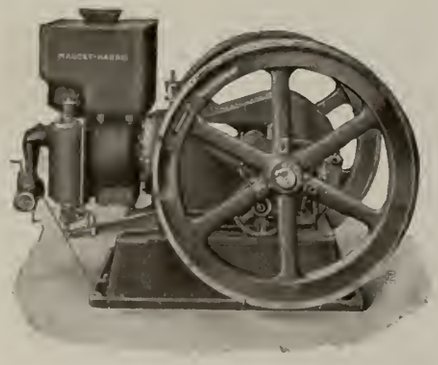
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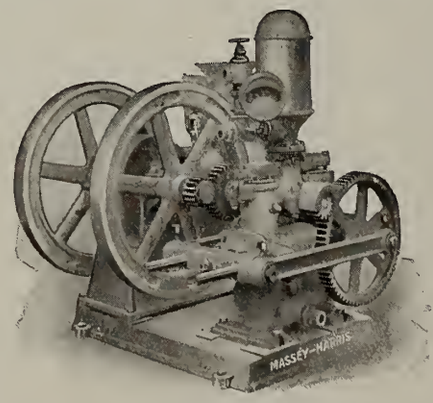
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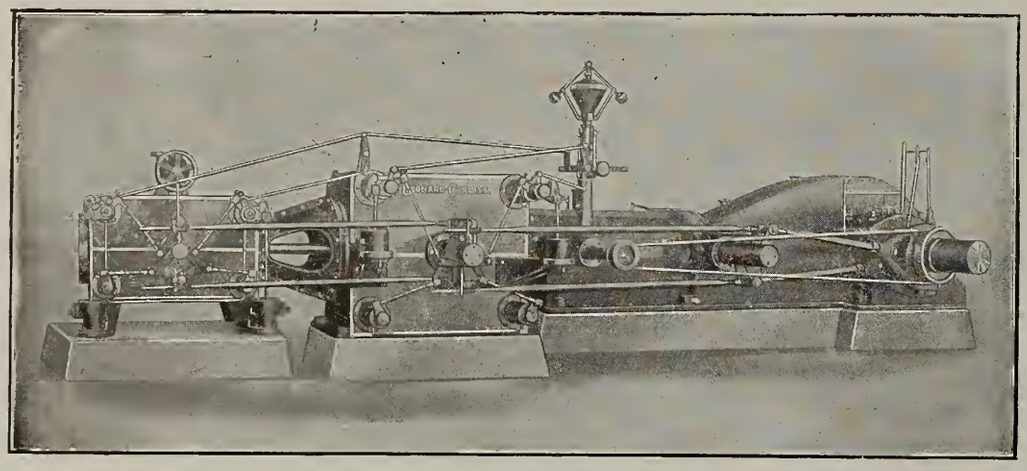
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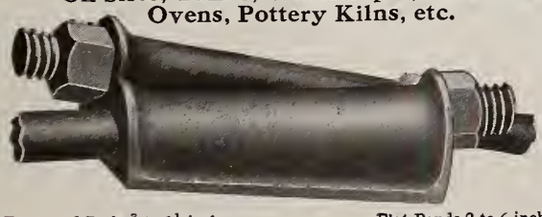
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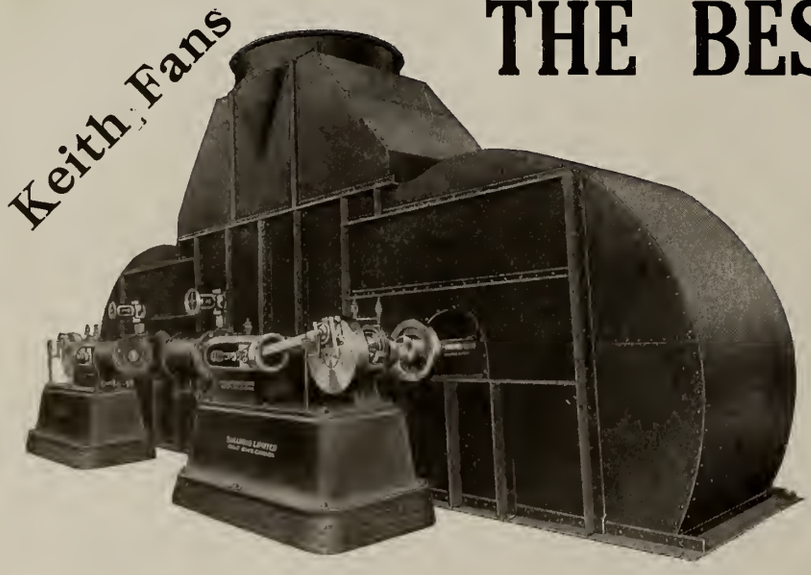


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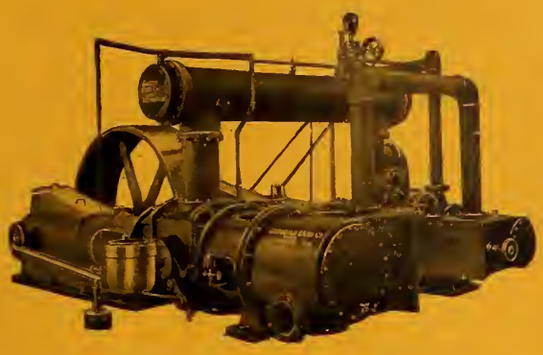
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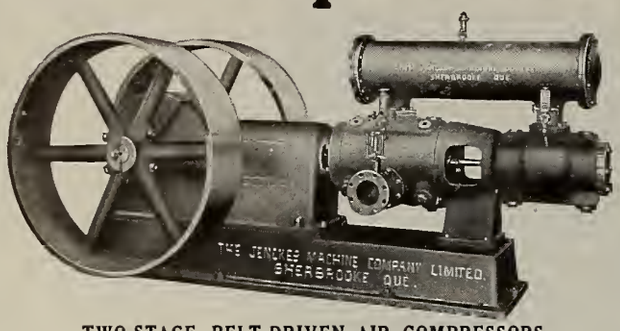
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Canada's soundness needs no argument with you. Canada's ability to weather this storm is not a matter of guesses or hopes—but one of facts and figures.

No one can exaggerate the awfulness of the present war, but the harm that admittedly can come through undue pessimism can be fended off only by men who with reason, and faith, and good seamanship, hold the tiller of common sense and courage firm against the present storm.

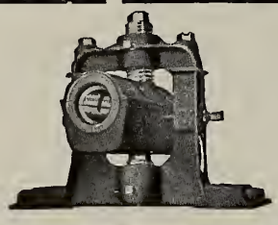
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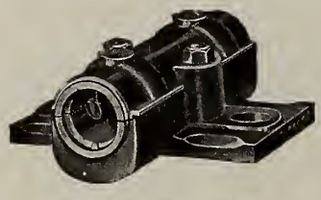
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INCORPORATED.

Vol. XV. | TORONTO, SEPTEMBER, 1914 | No. 2

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Seize German and Austrian Trade.

CANADIAN manufacturers will endeavor to seize some of the German and Austrian trade. While the greater part of it will no doubt be grasped by Britain and the United States, Canada should have a share. The British Empire Industrial League fixes the total annual value of German and Austrian exports at about $2,600,000,000. British manufacturers are organizing to substitute their goods for German and Austrian goods as much as possible in neutral markets, and the co-operation of Canada has been sought.

Britain Carries 40 per cent. of the World's Commerce.

BECAUSE the war is not affecting British shipping to any great extent, commerce is beginning to recover from its temporary paralysis.

According to a recent statement of Lloyd's, out of the world's aggregate tonnage of 47,000,000 gross tons in 1913-1914, 40 per cent was credited to Great Britain, 11 per cent. to the United States, 11 per cent. to Germany, about 5 per cent. each to Norway and France, 3 per cent. each to Holland, Italy and Japan, and the balance to Russia, Sweden, Austria-Hungary, Denmark and Spain.

The world's carrying power now includes approximately 31,000 vessels, with an aggregate capacity of 47,000,000 gross tons, and has nearly doubled in capacity during the last twenty years.

Consequently the allied nations, Great Britain, France, Japan and Russia, have about 16,000 out of the world's 31,000 merchant vessels actively engaged in trade; while the 4,000 vessels of Germany and Austria are idle.

United States After Export Trade.

THE United States will make strenuous efforts to pick up the trade temporarily dropped by the nations of Europe which are at war. That country, during the year ending June 30th, 1913, sold to other nations goods worth $2,465,884,149, and bought from them goods worth $1,813,008,234, leaving a balance in her favor of $652,875,915. She sold Europe $1,479,074,761 worth of goods and bought from Europe goods valued at $892,866,384. The United States has graduated into the class of great exporters. A great part of the United States export trade with Europe will be diminished. The following shows her trade during the past fiscal year with the countries engaged in war.

Countries.	Exports to.	Imports from.
Germany	$331,684,212	$188,963,071
Austria	23,320,696	19,192,414
United Kingdom	597,149,059	295,564,940
France	146,100,201	136,877,990
Russia	25,363,795	26,958,690

It is obvious that United States export trade with Germany and Austria, owing to the international laws of contraband and blockade, and also to the collapse of credit, has practically stopped. To a certain extent, the same is true of her export trade with Russia and France, because of the uncertainties of delivery and collection. To replace this loss the United States will compete strongly for the Canadian market and also for the neutral markets of Europe, South America, Asia and Africa.

Public men, manufacturers, exporters, and the press in the United States are co-operating in a great national campaign, which is bound to produce the desired result.

Canadian Manufacturers and Consumers

WHILE we are in this state of war certain duties devolve upon citizens which must be loyally discharged. It is the duty of manufacturers to do all they can to keep their plants in operation; it is the duty of consumers to buy Canadian-made goods in preference to any other goods; and it is the duty of manufacturers, consumers and the Government to see that reasonable prices are maintained. Our commercial energies should be directed along three main channels: home industry, establishment of new industries, and capture of export trade.

BUY CANADIAN GOODS

This is no longer a commercial appeal. It is the rallying cry of combatants fired with imperial and national patriotism. We must furnish Britain and our friends at war with food and supplies. More land should be brought under cultivation, and part of our urban population transferred to the task of bringing wealth out of the soil. The money received for our products will go far to provide for our necessities and, if wisely circulated in our own country, will alleviate distress from unemployment. This is the perfect circle that will benefit our farmers, keep our factories in operation, provide work, maintain credit and retain money. It is the duty of Canadian citizens to spend every possible dollar at home during the war. Sending money abroad in payment for foreign goods indirectly helps the enemies of Britain, because such action weakens ourselves. Campaigns should be organized by the citizens of every community. The support of the local press, public officials and consumers should be enlisted. It is evident that a flood of goods, from neutral countries, deflected from the ports of belligerent nations, will threaten to overwhelm our markets. While our fellow-countrymen fight in Europe, let us fight at home to develop the sources of our national wealth so that they may strengthen us in time of need. All that stands between our safety and prosperity and the colony-hungry Germans is a group of ships in the North Sea. The tremendous struggle is only begun. The end is shrouded in uncertainty. The struggle and its after-effects will tax us to the limit of endurance. Canadian producers and consumers must stand together, watchful of one another's interests, ready to sacrifice personal inclination, willing to incur inconvenience. This is no time to indulge whims, prejudices or fancies in favor of foreign manufactures. Neither should citizens who have means economize too severely; spend now, keep factories going and retrench later. In such a crisis everything should be done by the manufacturers, wholesalers and retailers, and, if necessary, by the Government, to keep down to the lowest possible figure the price of articles manufactured in Canada which Canadians are asked to buy for patriotic reasons. Manufacturers and other producers must show consumers that they are willing to dispense temporarily with profits and will be satisfied to make ends meet. By restricting their purchases to Canada, consumers are bound to reap the advantageous lowering of prices which is the natural result of large outputs, and they will escape the inevitable levies and possible confiscations which must follow wide-spread unemployment. Fight the enemy by buying at home.

DEVELOP NEW MANUFACTURES

Importations of German and Austrian goods being prohibited, it will be necessary for us to obtain articles previously exported to us by these countries, from other sources. Why not analyze the lists of these articles to determine how many of them should be made in Canada? Last year we imported half a million dollars' worth of clothing, over half a million dollars' worth of woollens, half a million dollars' worth of cutlery, half a million dollars' worth of socks and stockings, and half a million dollars' worth of toys from Germany. Why not make these goods here? Let us build up our trade and establish it firmly while competition is thus eliminated to our advantage. These are only a few out of many examples apparent from a perusal of the trade returns. Fight the enemy by establishing competing industries.

CAPTURE EXPORT TRADE

The export trade of our opponents has been temporarily paralyzed. Their ships are idle or prisoners. The rich fields of their export trade lie unsatisfied.

Who will supply substitutes for these articles of German manufacture? The United States is organizing a campaign to grasp the loose ends of export traffic. Great Britain has thrown her great fleet of merchant marine into the hunt. Shall Canadians remain apathetic with vast and fruitful fields open to our goods? Fight the enemy by seizing his export trade.

CANADIAN MANUFACTURERS' OPPORTUNITY

The Import of German Goods being Prohibited, Canadian Manufacturers Are Free from this Competition

THIS is a statement of our principal imports into Canada from Germany of articles which now pay duty under the General Tariff, and which compete with Canadian products.

The importation of all these goods has been wholly prohibited by order of the Canadian Minister of Customs. German goods stored in neutral warehouses cannot be imported. This is the opportunity for Canadian manufacturers. How many of these articles should be made in Canada? Let us seize the chance to substitute Canadian goods in these lines for German goods.

Compiled from Canadian Returns of last fiscal year

Baskets	$ 23,969	Railway car apparatus	$ 84,854
Brushes or brooms	45,029	Belts	5.436
Buttons	65,197	Lace, white or cream color, cotton	226,904
Cotton clothing	8,850	Curtains, cotton	757
Other cotton clothing	71,268	Gelatine	13,465
Embroideries, white and cream, cotton	45,041	Medicinal preparations	55,000
Cotton sewing thread on spools	17,639	Electric apparatus	84,388
Acids	13,793	Embroideries, n.o.p	21,750
Carbons, electric light, etc.	25,483	Boxes, fancy	63,260
Bead ornaments	1,767	Cases, jewelry	22,146
Braids, etc.	141,124	Other fancy feathers manufactured	24,281
Fancy feathers, etc., for millinery	127,648	Statues and statuettes	11,831
Lace collars, etc.	198,238	Feathers, bed and other	14,316
Toys	534,010	Silvered glass	31,140
Carpeting of flax	358	Glue	34,627
Gloves	380,057	Jewelry	175,296
Mfrs. of rubber	89,287	Manufactures of brass	49,145
Boot laces	4,679	Gold leaf, aluminum leaf, etc.	61,186
Mfrs. of copper	1,428	Hand pumps	22,532
Cutlery	400,137	Lead manufactures	6,246
Tools	60,902	Buckles	3,271
Aluminium mfrs.	14,318	Pins	4,317
Nickel-plated ware	19,107	Phonographs	5,789
Brass band instruments	2,810	Lead pencils	74,759
Pianos	18,692	Picture frames	3,753
Bronze powders	9,022	Ribbons	21,512
Pen-holders	5,426	Non-sparkling wines	38,338
Pocket books and purses	78,693	Watches	35,173
Silk clothing	47,501	Wool products	508,541
Trunks and handbags	553	Tobacco pipes	25,868
Furniture	8,232	Clocks, etc.	119,555
Musical instruments, other	135,364	Chocolate	74,289
Boots and shoes	34,601	Perfumery	22,560
Combs	81,507		

CANADIAN AND AUSTRIAN TRADE

CANNOT Canadian manufacturers supply most of these goods to Canadian buyers? Our principal imports from Austria, of articles which compete with Canadian products, consist of:—

Braids	$ 8,049	Silvered glass	$ 14,876
Electric apparatus	26,361	Jewelry	45,024
Feathers, etc	13,026	Iron manufactures	8,639
Glue	8,404	Furniture of wood	23,442
Gloves	53,022	Cotton mfrs.	55,784
Tobacco pipes	153,840		
Wool products	52,577	Our principal exports to Austria consist of:—	
Rubber manufactures	12,120	Agricultural implements	$ 111,093
Buttons	75,301	Asbestos	43,114

CANADIAN TRADE WITH FRANCE RUSSIA AND BELGIUM

If We Cannot Import Goods from These Countries We Should Try to Make Them Ourselves Instead of Buying Them from Neutral Nations

CANADIANS do not want to profit through the misfortunes of their friends. We are anxious to capture German and Austrian business in Canada just as we are anxious to capture their steamers on the ocean, for the double purpose of injuring our enemies and benefiting ourselves. We do not entertain similar designs against the Canadian trade of our allies, France, Russia, and Belgium. But the fact remains that the trade between Canada and these countries must be dislocated during the war. Consequently, the people of Canada may be forced to import the articles heretofore imported from France, Russia and Belgium from other countries, or manufacture them in Canada or do without them. Of these alternatives, the preferable one is to manufacture in Canada.

Compiled from Canadian Returns of Last Fiscal Year

FRANCE.

Automobiles	$ 47,847
Printed books	112,044
Brushes	136,311
Embroideries	79,650
Baskets	6,373
Braids	61,867
Other laces, such as collars, etc.	214,441
Gloves	716,207
Glue and gelatine	21,795
Manufactures of lead	26,599
Manufactures of brass	33,493
Braces and suspenders	9,675
Soap	163,489
Cheese	55,450
Buttons	40,638
Curtains and shams	33,231
Tobacco pipes	252,627
Canned tomatoes and other canned vegetables	156,675
Combs	23,354
Handkerchiefs	6,085
Canned fruits and jellies	40,516
Rubber manufactures	36,393
Cutlery and tools	17,224
Confectionery	28,784
Toys, etc.	19,333
Macaroni	88,266
Church vestments	38,290
Clocks, etc., including watches	50,624
Cotton clothing	121,890
Medicinal preparations	183,587
Electric apparatus	20,153
Fancy feathers, etc.	206,570
Dressed fur skins	243,212
Laces, boot, etc.	31,194
Pocket books, etc.	36,952
Jewelry and manufactures gold, etc.	217,202
Leather	20,747
Manufactures iron and steel	38,414
Mineral waters	108,167
Perfumery	168,717
Silk clothing	67,307
Wines, non-sparkling	378,518
Wool products	1,024,693
Ribbons	375,451
Vegetables, canned	156,675
Statuettes, etc.	24,512
Silvered glass	31,501
Boots and shoes	12,204
Musical instruments	$ 34,370
Wood manufactures	57,886
Sardines, etc.	41,578

Our principal exports to France consist of:—

Cattle	$ 25,560
Canned lobsters and canned salmon	1,033,302
Aluminum ingots	98,173
Grain	257,362
Furs, undressed	42,146
Agricultural implements	631,971
Wood alcohol	151,073

RUSSIA.

Our principal imports from Russia of articles which compete with Canadian products consist of raw hides, flax and other free materials.

Our principal exports to Russia consist of:—

Breadstuffs	$ 281,987
Agricultural implements	1,941,483

BELGIUM.

Our principal imports from Belgium of articles mentioned in the Belgian treaty, which compete with Canadian products, consist of:—

Cotton clothing	$ 11,482
Laces and embroideries	17,725
Glue and gelatine	18,955
Canned vegetables	123,169
Baskets	13,324
Gloves	9,373
Electric apparatus	4,293
Boot laces, etc.	79,954
Buttons	6,396
Wool products	139,346

Our principal exports to Belgium consist of:—

Breadstuffs	$3,395,167
Leather	39,797
Asbestos	121,939
Oil cake	269,619
Tar	41,625
Canned lobster and salmon	95,876
Aluminum ingots	260,336
Agricultural implements	27,868
Flax seed	26,353

CANADIAN TRADE WITH SWITZERLAND

OWING to the proximity of Switzerland to the scene of war, our trade with that country has been temporarily suspended. We should try to make these goods.

Our principal imports from Switzerland of articles which compete with Canadian products consist of:—

Embroideries	$1,005,549
Lace	160,111
Lace collars, etc.	24,368
Cheese	39,891
Ribbons	508,102
Embroideries and fancy goods	48,564
Cotton handkerchiefs	63,909
Chocolate and confectionery	$ 130,612
Curtains, etc.	36,720
Other handkerchiefs	26,011
Extract of meat	22,313
Iron and steel manufactures	14,269

Exports—A few small items only.

CANADIAN WOMEN BUYING CANADIAN GOODS.

"At a time when the Empire is straining every nerve against the common enemy, it is essential that each and every section of the community should stand together. Canada is sending her soldiers to the help of Great Britain, but it must be remembered that scarcely less effective help can be rendered by keeping trade and industry prosperous throughout the Dominion.

"By purchasing only commodities produced in Canada we should largely increase the output of our industries and provide employment for large numbers of workmen. To attain this desirable end it is hoped that, in so far as possible, housewives and others will buy products 'made in Canada.'"

This was the resolution passed at a meeting of leading Canadian women in Ottawa on Saturday. The meeting was held under the auspices of the Household League of Ottawa.

TRADE OF CANADA WITH BELLIGERENT NATIONS.

For the year ending March 31st, 1913.

With the Allies.

Country.	Imported from.	Exported to.
Great Britain	$139,646,356	$177,982,002
Russia	922,210	2,145,236
France	15,528,228	2,564,603
Belgium	4,096,432	4,808,997
Japan	3,138.534	1,139,598

With Germany and Austria.

Germany	$14,473,833	$3,402,394
Austria	1,674,349	154,594

War Stimulates Mining.

IT is certain that the war will stimulate the production of Canadian mines. Minerals of many kinds will be made more valuable, and the labor to secure them should be plentiful and cheap.

EUROPEAN WAR AND IMPLEMENT TRADE.

A tremendous blow has been dealt to the agricultural implement trade of Canada by the war.

Canada's exports of agricultural implements of all kinds for the ten months ending January, 1914, totalled $5,580,241. Of this amount 91 per cent. was with European countries, the amount of trade with countries other than the United Kingdom and the United States being $5,106,997. Trade in agricultural implements with other countries has been growing. For the ten months ending January, 1912, the total reached was $4,128,092, and in 1913, $4,371,670.

Details of the trade with countries other than the United Kingdom, the United States and Australia in agricultural implements is as follows:

	Ten months ending January		
Cultivators—	1912.	1913.	1914.
France	$31,959	$27,779	$39,126
Germany	1,088	.....	1,399
Other countries	34,632	22,652	31,323
Harrows—			
France	2,914	2,897	7,373
Germany	839	110	408
Other countries	52,752	81,343	83,868
Harvesters—			
France	143,230	72,408	353,189
Germany	143,613	86,791	481,756
Other countries	361,685	744,998	785,133
Hay Rakes—			
France	64,251	.....	43,388
Germany	31,559	1,768	82,580
Other countries	70,979	60,334	77,980
Mowing Machines—			
France	130,768	45,729	240,908
Germany	67,133	17,292	100,344
Other countries	131,853	203,981	196,876
Ploughs—			
France	579	987	910
Germany	1,016	212	.....
Other countries	266,611	281,175	242,376
Reapers—			
France	28,212	331	38,018
Germany	85,998	7,210	64,962
Other countries	210,000	81,813	76,104
Other Implements—			
France	44,047	50,310	56,938
Germany	18,467	9,145	12,683
Other countries	762,595	1,493,728	506,487
Parts—			
France	48,731	38,463	118,583
Germany	54,169	65,476	96,955
Other countries	145,427	212,359	289,909

FINANCING THE EXPORT OF OUR MANUFACTURES TO SOUTH AMERICA

BY H. M. P. ECKHARDT

As the Attention of Canadian Manufacturers will be Turned to South America in the Hope of Securing Some of the Export Trade Dropped by Germany and Austria, Industrial Canada Has Secured the Following Article, Written by an Experienced Banker, on Methods of Financing Exports to the Various Countries of South America

At the time of writing this article, the export trade of Canada and the United States and that of practically all other countries is demoralized by the war. Shippers and vessel owners of all nations during the first half of August, immediately after the outbreak of hostilities, feared to entrust their property to the sea on account of the danger of interference or capture by one or other of the belligerents. In the second half of the month it was demonstrated that the British and French navies had complete command of the seas, and the British and French steamship lines, also neutral lines plying to the ports of the Triple Entente (excepting Russia) and to neutral ports, gradually recovered their confidence, and as war insurance risks then declined to more reasonable figures, sailings were resumed.

Canadian Difficulties.

However, the establishment of British superiority at sea did not suffice to remove the great difficulties of Canadian and other exporters. They still had to confront the fact that the available supply of vessels was altogether inadequate for the traffic offering. The German lines, for example, included something like 3,000 ships. An immediate result of the war was to sweep this tonnage off the ocean. It is said that over 200 ships have been captured or seized; a large number have been interned in neutral ports; others lie idle in German or Austrian ports; and some are yet on the high seas liable to capture. The removal of this large aggregation of vessels in itself was calculated to create a scarcity of transportation facilities. Then, as regards the British and French merchant marine, a considerable number of ships ordinarily engaged in carrying merchandise have been taken for war purposes—transporting troops, munitions, etc.—and the crews of others have been depleted or greatly weakened by the drafts made for the purpose of manning the warships.

So, before the export trade can be resumed on anything like a satisfactory scale this scarcity of ships must be overcome. Another difficulty, most serious from the exporters' point of view, has existed in the breakdown of international exchange. Even when the goods had been loaded and shipping bills duly received, it proved impossible or next to impossible to negotiate the bills of exchange drawn against the shipments. The bankers and exchange dealers in New York, Montreal, Toronto, and other North American ports, would not, for a few weeks after the beginning of the war, buy the bills or make advances upon them. Their refusal to do so arose out of the uncertainty as to the acceptance of the bills on reaching the other side of the Atlantic. And because of the action of the principal European nations in having recourse to the moratorium there was doubt as to the payment of the bills of exchange even if duly accepted. Another thing operating to deter bankers in America from purchasing bills of exchange drawn against exports was seen in the difficulty of re-transferring their funds to this side of the ocean. When a banker in Montreal or New York buys a bill of exchange on London, he parts with cash or its equivalent, say, in New York, and becomes possessed of the right to collect an equal amount in London. So his funds are transferred to the other side of the Atlantic. In ordinary times he proceeds to get them back again immediately through selling in New York his own bill on London; but that process could not be followed during the period of the blockade.

Then, as the financial crisis was of the first magnitude there was natural reluctance on the part of bankers in all countries to part with their cash resources. On behalf of the consignees and accepting houses in Europe it is claimed that they were precluded from accepting by the fact that the central banking institutions and the ordinary commercial banks were not discounting paper or buying bills—so the usual means of meeting the acceptances when due were not available.

Special Financial Measures.

As August wore on the British, French, American, and Canadian Governments, acting in conjunction with the banking interests, gradually got into operation special measures designed to do away with the blockade in exchange and to reconstruct the machinery for granting or creating credits. Among the more important of the measures put into force abroad for these purposes were the suspension of the Bank Act of 1844 in England whereby the Bank of England was authorized to expand its note issues beyond the fixed limit; the guarantee by the British Government of bills of exchange discounted by the Bank of England; the establishment of the trust depository at Ottawa, wherein gold might be deposited for account of the Bank of England; the opening of credits by the French Government with J. P. Morgan & Co. for facilitating exchange dealings with America; the issue of emergency circulation in the United States and the authorization of Bank of England notes for £1 and for 10 shillings in England.

Various measures have been taken in Canada to effect similar purposes. The banks were relieved of the obligation of paying their liabilities in specie or legal tender; provision was made for issuing Dominion notes to the banks on deposit of securities approved by the Minister of Finance; the Dominion Government announced that it had ceased to pay Dominion notes on demand in specie; and the Government took steps to appropriate $15,000,000 of the specie reserve held against Dominion notes—through raising the uncovered issue, against which 25 per cent. in specie is to be held, from $30,000,000 to $50,000,000. It is quite possible that all of these measures were absolutely necessary. If so, the business men and the public generally should not complain; but it is to be hoped that the bankers and the Government did not fall into a panic over the outlook and put some of these extreme measures into effect before there was any need for them. The plan of raising the uncovered issue of Dominion notes from $30,000,000 to $50,000,000 is specially open to criticism in that it appears to permanently weaken the Dominion notes. That is much to be regretted, especially as the action of the Finance

Department in ceasing to pay gold for these notes served as another seriously weakening factor. Henceforth the banks will not be able to rank the Dominion notes as practically equal to gold for reserve purposes.

At any rate, one would think that in view of their exemption from paying their liabilities in specie and the provision for Government loans to them on securities, the banks should make special efforts to finance the operations of Canadian manufacturers and merchants so as to enable them to carry on business. There ought not to be any difficulty about discounting good trade bills when the lines are kept within reasonable limits; and where loans are absolutely needed for purchases of raw material, these should be forthcoming, too. The *London Statist* told the manufacturers of the British Isles the other day that it is very important that they keep their plants going wherever possible, in order to keep up the financial strength of the kingdom. The same thing applies to Canada; our financial strength will be maintained and increased if the manufacturing and mercantile concerns which are able to operate at a profit are kept going, and it would be deplorable if any of them were prevented from doing so by the want of banking accommodation.

Bankers Should Assist Manufacturers.

To keep Canadian plants going it will be necessary for the bankers to finance export as well as home trade. Efforts are mainly directed at present towards providing facilities for export of grain and other agricultural produce; but as conditions gradually improve the facilities for financing exports of manufactured goods will also have to be provided. Canadian manufacturers who have been doing a large export trade have seen their business thrown into utter confusion. The president of the Dominion Steel Corporation the other day explained that parties who had contracted for goods were unable to take delivery, or to pay for goods even if they were delivered. While that state of affairs prevailed there would be little or no export business; but sooner perhaps than is expected conditions will be improved, and we may expect to see our manufactured products shipped abroad in large volume.

The United States newspapers are hailing the present as a grand opportunity for acquiring South American trade that has hitherto been enjoyed by Europe. The European nations, engrossed in war, will not be able to supply the South American republics with the accustomed articles, and no doubt the Americans will be able to appropriate some of this trade. The same opportunity is open to Canada, and we should see our trade with South America in some lines show satisfactory development. In connection with this trade the financing of the exports has always been a rather troublesome question for our manufacturers. The long time that must elapse before the shipments reach the consignees, and before the funds can be received in Canada, makes such shipments expensive in certain respects. In articles previously published by INDUSTRIAL CANADA this problem of exchange has been discussed. It was pointed out that the bank buying a bill drawn direct on a South American port would be "out of its money" for from three to six months; and the interest on the transaction, taken in conjunction with the charge or commission for collecting and transferring the funds, would perhaps make the entire cost from three to five per cent., according to the distance covered.

Difficulties of Financing S. A. Shipments.

Under present conditions the financing of cargoes sent to far-away South American ports by Canadian mannfacturers presents exceptional difficulties. In the first place there are German warships in the track of vessels embarking for South America, on the Pacific as well as on the Atlantic, and the danger of capture exists. This tends to increase the war insurance rates. Next, the bankers and exchange dealers, while they are using their utmost efforts to restore the exchange mechanism connecting London with New York and Montreal, are not as yet able to give their attention to the matter of negotiating exchange on South America. After the sterling exchange market in New York resumes operations in full or unrestrictedly, then the market for exchange on other countries may be restored.

In the meantime there is, more than ordinarily, a need for Canadian exporters in the South American trade to insist on London bankers' credits. Although the issue of these credits was discontinued at the outbreak of the war, it will be resumed as soon as London resumes unrestrictedly its enormous business of accepting and discounting bills of exchange. The British and French banks in South America will then issue commercial credits on London and Paris. The London credits are essential because the banks in Canada, for some time to come, will be indisposed to put their money into long-winded transactions such as purchase of bills drawn direct on South America. They will be bending their efforts towards keeping their funds strictly in short-date transactions. From the banker's point of view there is a tremendous difference between buying a bill on London, drawn under the terms of a bankers' credit, and buying a bill on South America. In case of the former the bank can get its money back next day through selling the bill in New York; whereas in case of the latter the money could not be recovered for several months.

This special necessity for London bankers' credits is likely to be in evidence for some time, as the war will probably make money comparatively dear for several years. The credits should be arranged for at the time of making the sale—that is, the sale should be made on the basis of the London credit. This greatly reduces the responsibility of the Canadian exporter and facilitates his financing. With financial and political conditions as at present he should not take the risk of shipping his goods to a far-away country like South America unless he has the undertaking of a good bank for the prompt acceptance of the bill on its arrival in London.

It is said that the National City Bank of New York is going ahead with arrangements for establishing branches in South America. Presumably its venture will be made first at Buenos Ayres and Rio de Janeiro, and when the connection is established our bankers may be able to dispose of bills on South America to better advantage in New York. Perhaps eventually branches of the more important Canadian banks may be started in Brazil and Argentina; but for the present our banks are likely to avoid such expansion of their business field. If after the war is over it is found that Canadian trade with South America has grown to such proportions as to warrant the establishment of branches there, doubtless the move will be made. Then the matter of financing our exports thither will be to some extent simplified.

INTERNATIONAL HARVESTER COMPANY.

On Wednesday, August 12, the International Harvester Company was declared by the United States District Court, sitting in St. Paul, to be a monopoly in restraint of interstate and foreign trade.

President Cyrus H. McCormick, making public comment on this decision, remarks that it is given by a divided court, and that the Supreme Court will have the last word. He says: "We still hope that the great public benefits secured by the organization of the company, and the methods adopted in carrying on its business, will be made permanent by the final decision in the court of last resort."

TRANSPORTATION

By J. E. WALSH

THE application of the rail carriers in the United States' official classification on territory for permission to advance their rates five per cent., in which a large number of Canadian manufacturers were interested, has been disposed of by the Interstate Commerce Commission.

It was proposed to advance the rates up to the United States frontier five per cent. on coal. The Canadian railways at the same time filed both with the Interstate Commerce Commission and the Canadian Railway Commission, tariffs making a minimum increase of five cents per ton from the frontier thus Canadian consumers were confronted with two advances. Protests were filed against this with the Board of Railway Commissioners for Canada. The manager of the Transportation Department of the C. M. A. also appeared before the Interstate Commerce Commission.

The Commission does not consider that the carriers have justified their demand for an increase on heavy commodities such as brick, tile, clay, coal, coke, starch, cement, iron ore and plaster. The majority finding is as follows:

> "That the net operating income of the carriers in Official Classification Territory considered as a whole, is smaller than is demanded in the public interest; but that no showing has been made warranting a general increase in trunk line rates, or in rail and lake rates, or in the rates on traffic moving between different rate territories in Official Classification Territory.
>
> "An increase by five per cent. in the intra territorial class and commodity rates in Central Freight Association Territory approved subject to the qualifications described in the Report."

The Commission has offered for consideration by all the carriers in Official Classification Territory a number of suggestions as to the methods by which they may increase their net income other than by general rate increase. Special attention is called to the existence of many individual rates and charges unremunerative. Some of the methods suggested are to increase passenger fares, cut off so-called free special services, discontinue the free interchange of passes and the hauling of private cars free. A number of other suggestions along the same line have been offered.

Whilst it is true that the advance the carriers wanted has not been allowed in trunk line territory, it is felt that the decision is substantially in their favor as showing that while the Commission recognizes the carriers have a public duty to perform, private capital so invested is entitled to a fair return without placing undue burdens upon commerce.

The advance allowed in Central Freight Association Territory will not seriously affect the movement of traffic to or from Canada and that territory.

Central Freight Association Territory begins at Buffalo, N. Y., thence via the south shore of Lake Erie to and including Toledo, Ohio; thence via the west shore of Lake Huron, through the Straits of Mackinac to Mackinac City; thence via the west shore of Lake Michigan to Chicago; thence via a line just west of the "Soo" Line to a point just west of Rockford, Ill., extending to Dubuque, Iowa. It also embraces Burlington, Iowa to Louisiana, Mo.; thence via the west bank of the Mississippi River to Cairo, Ill., stations on and north of the north bank of the Ohio River to Cincinnati, Ohio; thence on and north of the Chesapeake & Ohio Railway to Huntington, W. Va., and Wheeling, W. Va., to Pittsburg, Pa.; thence via Pennsylvania R.R. through Butler, Parker, Franklin, Oil City and Corydon, Pa., to Salamanca, N.Y.; thence via Erie R.R. via Dayton, N.Y., to Buffalo.

Lumber Rates from South.

For some years past manufacturers along the old Grand Trunk main line, and north thereof, have been complaining of the adjustment of rates on lumber from the South and the excess of arbitraries which they have had to pay over the rates to the different rate basing points in Canada. As an illustration, the arbitrary to Midland over Toronto is now seven cents per hundred pounds; whereas the arbitrary over Toronto to Owen Sound is one cent. These complaints were supported by the Canadian Manufacturers Association and resulted in the Board making an order requiring the G.T.R. and C.P.R. to publish and file special tariffs of arbitraries from Canadian basing points on lumber ex Southern States to ultimate destinations which are points on and north of the G. T. R. main line eastwardly from Point Edward. The order is full and will be easily understood. No change is to be made in the basing rates, or in the rates from the Ohio and Mississippi River crossings to basing points in Canada. This order will stand until new through tariffs from southern shipping points are issued.

It will be the duty of Canadian receivers to determine from an inspection of their new tariffs and arbitraries from the different basing points, whether it will be more to their advantage to order their lumber consigned from the South through to final destination under the through tariffs now in effect, or to consign it to the different basing points to be designated in the new tariffs prescribed by the Board from which the arbitraries will be charged on the filing of reconsigning instructions with agents at the said points.

It is understood that the arbitraries are those shown in the Canadan Freight Basis No. 5, although No. 6, so far as we know, is still in existence. We will not be able to determine which basis is used until the tariffs come to hand. If the higher arbitraries are issued the matter will be brought to the attention of the Railway Commission.

It is the understanding that there will be no attempt to change these arbitraries so as to increase the through rates over what they would have been had the Southern Lines reissued their through tariffs on the existing basis from the Ohio and Mississippi River crossings; also that no change is to be made in the rates from these crossings to the different basing points in Canada as the result of this order.

The following general order (No. 128) has just been received from the Board of Railway Commissioners:

1. No toll contained in any special or competitive freight or express tariff, referred to in subsections 3 and 4 of section 326, and subsection 2 of section 348 of the Railway Act, shall be advanced until it has been in force for at least thirty days.

Provided that when a special or competitive freight or express tariff contains a notice that any reduced toll shown therein will expire upon a given date, which date shall not be less than thirty days from the date upon which the said reduced toll becomes effective, the said notice shall be con-

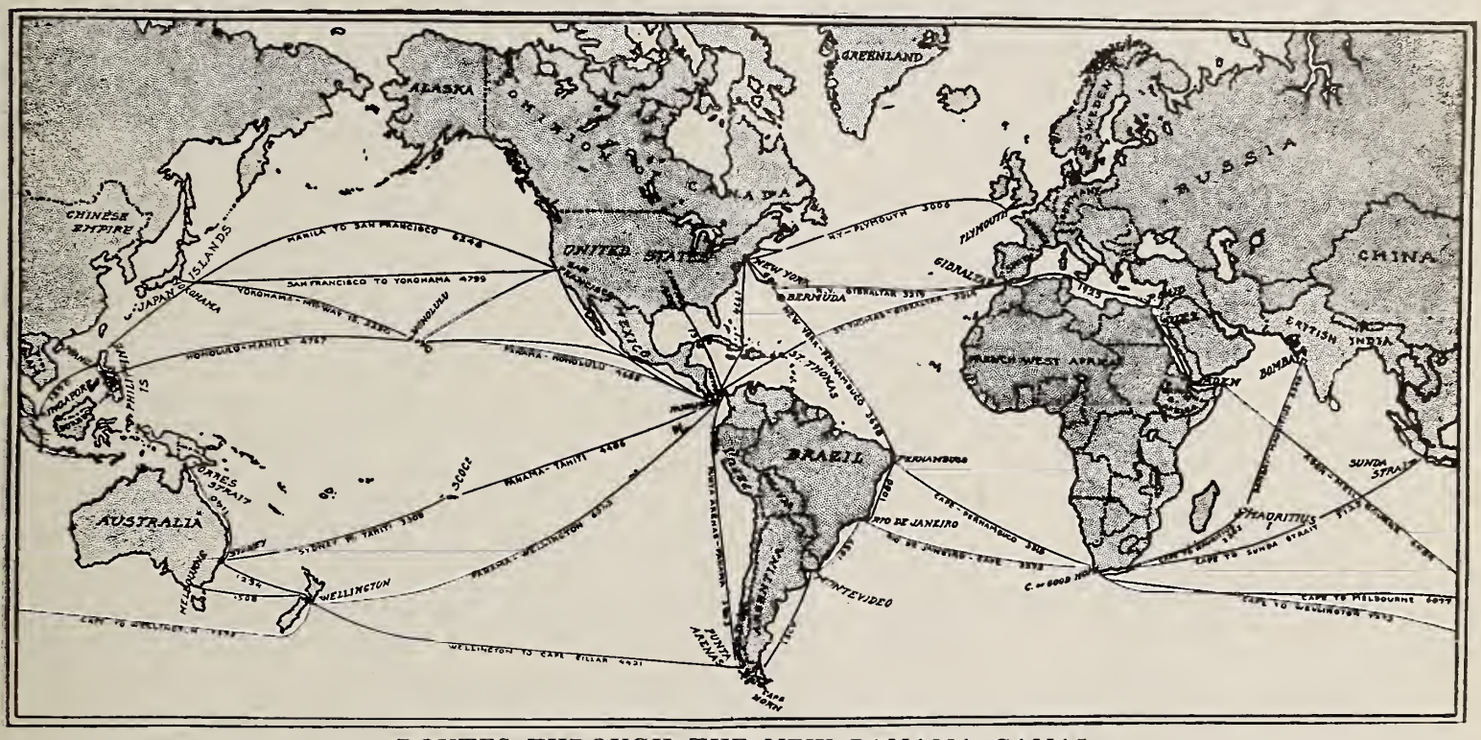
sidered to comply with subsection 3 of section 328 of the Railway Act, as amended by section 11, 1-2 George V., Chapter 22.

2. Except of its own notion, or on special grounds advanced, the Board will not ordinarily suspend, or postpone the effective date, of any tariff, or any supplement to a tariff, or any particular rate, or rule, or regulation of the carriers subject to its jurisdiction, which directly or in effect, increases the charge to be paid for the same or similar service, unless an application for suspension, or postponement, is received by the Board at least fourteen days before the date when the charge complained against is published to become effective; such application to give the "C.R.C." number of the schedule, and the item thereof complained against.

There has been some difficulty of late in that sufficient notice has not been given of such changes. It will be observed that no toll contained in any special or competitive freight or express tariff shall be advanced until it has been in force for at least thirty days.

The order also outlines the course to be pursued to secure the suspension or postponement of the effective date of any tariff or supplement to a tariff, or any particular rate, rule or regulation of the carriers. Such applications must be in the hands of the Board at least fourteen days before the date when the charge complained against is published to become effective; and it must give the "C.R.C." No. of the schedule and the items thereof complained against.

As to the second part of the order—heretofore the Commission as a rule has dealt with all complaints received without regard to the procedure now laid down. Hereafter it will be necessary to follow the instructions contained in this order in order to get a hearing.



ROUTES THROUGH THE NEW PANAMA CANAL

The Panama Canal was opened on August 15th. The above map shows the probable trade routes via the new waterway. Eastern Canadian ports will ship through the canal to the west side of Africa, and western Canadian ports will use it to supply the north and west coasts of South America. It will also provide new shipping routes from Canada to Africa, Europe, Asia and Australia

A PATRIOTIC DUTY.

The plea to Canadians made by J. Fraser Taylor, president of the Lake Superior Steel Corporation, is particularly timely and patriotic at the present crisis. Mr. Taylor says:

"Why should not Canadian manufacturers stand together and make up their minds firmly to purchase as little as possible outside of Canada. The imports from the States are enormous, and for patriotic reasons even at the sacrifice of the little extra cost it will pay Canadian manufacturers to buy in Canada. It is up to every Canadian not only to be patriotic to the Empire but to be patriotic to Canada and in no other way can such patriotism be shown than by a determination to help Canadian industries at this juncture."

Mr. Taylor supplements his statement by saying that all supplies purchased by his company will, hereafter, be of Canadian manufacture or origin wherever possible, even if the cost of some of them is in excess of what imported goods would cost.

The adoption of the suggestion would seem to be the duty of every patriotic Canadian, no matter how modest his requirements are.

HON. MR. WHITE TELLS US TO KEEP COOL.

In his budget speech Hon. Mr. White, Minister of Finance, said: "To many of our industries, and notably to agriculture, there should be pronounced stimulation and quickening of activity. Trade between Canada and the Motherland will undoubtedly receive an impetus, the importance of which to our future relations it would be difficult to over-state. If I have any general advice to offer, it is that the people of Canada will, as I am sure they will, continue to maintain the calm, sane judgment for which they have always been noted. Above all, confidence is a supreme patriotic duty, confidence in one another, confidence in our country and its institutions, in the Empire, in the righteousness of our cause, and, under Providence, in the certain ultimate triumph of our arms."

INSVRANCE

THE European war cannot fail to cause considerable anxiety to insurance companies doing a worldwide business, especially to companies doing a large business on the continent. All companies have naturally felt the effect of the shrinkage in security values which took place even before the war actually began. Fortunately the great majority of companies doing business in this country are in a secure position and are able to continue transacting business with equanimity n face of the general war conflagration across the seas. British companies, as a rule, are in an exceptionally strong position to weather the most severe strain. Their resources and their conservative methods of doing business will continue to inspire confidence wherever they operate.

Still another Canadian fire insurance company has been compelled to cease doing business. The Equity Fire Insurance Company has reinsured all its outstanding policies with the National Ben Franklin Fire Insurance Company. The ultimate failure of the "Equity" has been considered probable for some time. The management of the company has not been such as to inspire confidence. Poliyholders are to be congratulated on having materially improved the security of their policies through reinsurance in the "National Ben Franklin." The latter company will endorse all Equity policies to the effect that liability has been transferred.

There is a good deal of mystery regarding policies issued by the "German-Canadian Underwriters' Agency," which policies purported to be guaranteed by the "Equity." The latter company, however, disclaim all liability under such policies, and it is understood that no authority was ever given for the use of the Equity Company's name, and that the "Equity" never received any part of the premiums payable under the Agency's policies. These matters appear to call for strict enquiry on the part of the Government. All policies issued by the German-Canadian Underwriters should be replaced immediately and returned for cancellation.

The report of the Hamilton Fire Department furnishes striking proof of the fact that Canada's appalling fire loss is in a large measure preventable. Out of 186 fires, 45 were caused by children and matches, and the cause of 23 is designated as carelessness. Among other causes given may be mentioned defective electric wiring, cigar and cigarette stubs, hot ashes and fireworks. Sooner or later policyholders will realize that they themselves, and not the insurance companies, have to pay this tremendous annual tax. When that time arrives property owners will not only take more precautions themselves, but will take steps to prevent carelessness on the part of their neighbors.

Apropos of a paragraph which appeared in the June number of INDUSTRIAL CANADA, insurance has won a great victory in Kentucky. After three months of suspension of business because of adverse legislation, the companies are able to resume with every important point and principle conceded for which they had contended. Foremost among these is the declaration that the State concedes to them the right to make rates which shall yield them a reasonable margin of profit, which had been the essence of the controversy. It will be remembered that insurance companies withdrew from Kentucky owing to a law passed in that State increasing the tax upon fire insurance and authorizing a Government bureau arbitrarily to cut down insurance rates on whatever risks they thought fit.

At the end of 1913 fire insurance companies doing business in Canada had a net amount at risk totalling considerably over three billion dollars, an increase of $413,000,000 over the previous year. Gross cash premiums paid last year amounted to $35,000,000, a nincrease of over $5,000,000. Of that sum $15,699,429 went to British companies, $10,117,316 to Canadian companies, and $9,289,162 to United States and other companies. Total losses in Canada by companies included in the above figures were as follows:—

British Companies	$6,939,451
Canadian Companies	3,008,979
United States and other Companies	4,043,674

The above figures fall far short of representing the total insurance transacted in Canada, as only returns of licensed companies are taken into account.

The assets of Canadian companies total nearly $18,000,000. The total assets in Canada of British companies amount to $30,904,405, while the total assets in Canada of United States companies amount to $8,263,793.

The Senior New England Mutuals have long claimed to be free from the dangers of the ordinary mutual companies. The recent fire in Salem, Mass., has, however, awakened their members to the fact that these companies can be seriously affected by and need large reserves to protect them against the conflagration hazard.

The losses of the Senior Mutuals in Salem will probably cause a heavy reduction in their dividends, and is likely to result in a considerable amount of business returning to stock companies. The following are among the companies sustaining the largest losses in the Salem conflagration:—

	Gross Loss.
Boston Manufacturers' Mutual	$832,526
Arkwright Mutual of Boston	664,794
Firemen's Mutual of Providence	373,763
State Mutual Fire of Providence	302,830

It is not commonly realized that, after adding interest on the deposits demanded by New England Mutual Companies, the final rate paid such companies is in many cases only a few cents less than that at which insurance in stock companies could be obtained; scarcely sufficient to compensate for the difference between mutual and stock insurance, particularly when the large companies and brokers are able to offer adequate service as well.

TARIFF

By J. R. K. BRISTOL

THE following tariff changes were made on August 21st by the Dominion Government to help pay the expenses of war:—

Tariff Items.		British Preferential Tariff.	General Tariff.	Former General Tariff.
21	Cocoa paste or "liquor" and chocolate paste or "liquor," sweetened, in blocks or cakes not less than two pounds in weight ....per pound	4 cents.	4½ cents.	4 cents.
22	Preparations of cocoa or chocolate in powder form .....22½ p.c.		27½ p.c.	25 p.c.
23	Preparations of cocoa or chocolate, n.o.p. and confectionery coated with or containing chocolate, the weight of the wrappings and cartons to be included in the weight for duty ....per pound	1 cent.	1 cent.	½ cent.
	and.....22½ p.c.		35 p.c.	35 p.c.
25	Chicory, kiln-dried, roasted or ground, per pound .....2 cents.		3 cents.	Same.
25a	Coffee, extract of, n.o.p., and substitute therefor of all kinds, per lb..5 cents.		6 cents.	3 cents.
26	Coffee, roasted or ground, and all imitations thereof and substitutes therefor, including acorn nuts, n.o.p. ..... per pound	4 cents.	5 cents.	2 cents.
27	Coffee, roasted or ground, when not imported direct from the country of growth and production...per pound	4 cents.	5 cents.	2 cents
	and.....7½ p.c.		10 p.c.	10 p.c.
28	Coffee, green, imported direct from the country of growth and production, and green coffee purchased in bond in the United Kingdom..... .....per pound	2¼ cents.	3 cents.	Free.
28a	Tea imported direct from the country of growth and production and tea purchased in bond in the United Kingdom .....Free.		Free.	Free.
29	Coffee, green, n.o.p. .....per pound	3 cents.	3 cents. }	
	and.....10 p.c.		10 p.c. }	10 p.c.
29a	Tea, n.o.p. .....10 p.c.		10 p.c.	10 p.c.
43	Condensed milk, the weight of the package to be included in the weight for duty .....per pound	2½ cents.	3¾ cents.	3¼ cents.
44	Condensed coffee with milk .....25 p.c.		35 p.c.	30 p.c.
45	Milk foods, n.o.p., prepared cereal foods, in packages not exceeding twenty-five pounds weight each...20 p.c.		27½ p.c.	25 p.c.
66	Biscuits, sweetened .....20 p.c.		30 p.c.	27½ p.c.
103	Fruits preserved in brandy, or preserved in other spirits, and containing not more than forty per cent. of proof spirit in the liquid contents thereof .....60 p.c.		60 p.c.	50 p.c.
104	Fruits preserved in brandy, or preserved in other spirits, and containing more than forty per cent. of proof spirit in the liquid contents thereof .....per gallon	$3.00	$3.00	$2.40
	and.....30 p.c.		30 p.c.	30 p.c.
105	Fruits in air-tight cans or other air-tight packages, n.o.p., the weight of the cans or other packages to be included in the weight for duty... .....per pound	1¾ cents.	2½ cents.	2¼ cents.
106	Jellies, jams, preserves, and condensed mince meats....per pound	2¾ cents.	3¾ cents.	3¼ cents.
107	Preserved ginger .....25 p.c.		35 p.c.	30 p.c.
113	Cocoanut desiccated, sweetened or not .....per pound	3½ cents.	4½ cents.	4 cents.
134	All sugar above number sixteen Dutch standard in color, and all refined sugars of whatever kinds, grades or standards, testing not more than eighty-eight degrees by the polariscope ....per one hundred pounds	$1.52	$1.93	93 cents.
	And for each additional degree over eighty-eight degrees ....per one hundred pounds	1 cent.	1 1-3 cents.	Same.
	Provided that fractions of five-tenths of a degree or less shall not be subject to duty, and that fractions of more than five-tenths shall be dutiable as a degree.			
	Provided that refined sugar shall be entitled to entry under the British Preferential Tariff upon evidence satisfactory to the Minister of Customs that such refined sugar has been manufactured wholly from raw sugar produced in the British colonies and possessions, and not otherwise.			
135	Sugar, n.o.p., not above number sixteen Dutch standard in color, sugar drainings or pumpings drained in transit, melado or concentrated melado, tank bottoms, sugar concrete, and molasses testing over fifty-six degrees and not more than seventy-five degrees by the polariscope ....per one hundred pounds	88 cents.	$1.11¼	31¼ cts.
	And for each additional degree over seventy-five degrees ....per one hundred pounds	¾ cent.	1¼ cents.	Same.
	Provided that fractions of five-tenths of a degree or less shall not be subject to duty and taht fractions of more than five-tenths shall be dutiable as a degree. Provided that all raw sugar, including sugar specified in this item, the produce of any British colony or possession, shall be entitled to entry under the British Preferential Tariff when imported direct into Canada from any British country.			
	Provided that sugar imported under this item shall not be subject to special duty.			
135a	Raw sugar as described in tariff item 135, when imported to be refined in Canada by Canadian sugar refiners, to the extent of the quantity of sugar refined during the calendar years 1912 and 1913, by such refiners from sugar produced in Canada from Canadian beet-root under regulations by the Minister of Customs, per one hundred pounds, testing not more than seventy-five degrees by the polariscope .....88 cents.		88 cents.	25 cents.
	And per one hundred pounds for each additional degree over seventy-five degrees .....¾ cent.		¾ cent.	Same.
	Provided that sugar imported under this item shall not be subject to special duty.			
	This item to expire December 31, 1914.			
141	Sugar candy and confectionery, n.o.p., including sweetened gums, candied peel, candied pop-corn, candied fruits, candied nuts, flavoring powders, custard powders, jelly powders, sweetmeats, sweetened breads, cakes, pies, puddings and all other confections containing sugar, the weight of the wrappings and cartons to be included in the weight for duty .....per pound	½ cent.	½ cent. }	
	and.....22½ p.c.		35 p.c. }	35 p.c.
143	Cigars and cigarettes, the weight of cigars to include bands and ribbons, and the weight of cigarettes to include the paper covering, per pound	$3.50	$3.50	$3.00
	and.....25 p.c.		25 p.c.	25 p.c.
144	Cut tobacco .....per pound	65 cents.	65 cents.	55 cents.
145	Manufactured tobacco, n.o.p., and snuff .....per pound	60 cents.	60 cents.	50 cents.
146	Ale, beer, porter and stout, when imported in casks or otherwise than in bottle .....per gallon	30 cents.	30 cents.	16 cents.
147	Ale, beer, porter and stout, when imported in bottles .....per gallon	42 cents.	42 cents.	24 cents.
	Provided that six quart bottles or twelve pint bottles shall be held to contain one gallon.			
150	Lime juice and fruit juices, fortified with or containing not more than twenty-five per cent. of proof spirits .....per gallon	75 cents.	75 cents.	60 cents.
151	Lime juice and fruit juices, fortified with or containing more than twenty-five per cent. of proof spirits .....per gallon	$3.00	$3.00	$2.10
	and.....30 p.c.		30 p.c.	30 p.c.
152	Lime juice, fruit syrups, and fruit juices, n.o.p. .....17½ p.c.		22½ p.c.	20 p.c.
156	Ethylalcohol or the substance commonly known as alcohol, hydarted oxide of ethyl or spirits of wine, n.o.p.; gin of all kinds, n.o.p.; rum, whiskey and all spirituous or alcoholic liquors, n.o.p.; amyl alcohol or fusel-oil, or any substance known as potato spirit or potato oil; methyl			

Tariff Items.		British Preferential Tariff.	General Tariff.	Former General Tariff.
	alcohol, wood alcohol, wood naphtha, pyroxylic spirit or any substance known as wood spirit or methylated spirits, absinthe, arrack or palm spirit, brandy, including artificial brandy and imitations of brandy, n.o.p.; cordials and liqueurs of all kinds, n.o.p.; mescal, pulque, rum, shrub, schiedam and other schnapps; tafia, angostura and similar alcoholic bitters or beverages; and wines, n.o.p., containing more than forty per cent. of proof spirit.....per gallon of the strength of proof	$3.00	$3.00	$2.40
	Provided, as to all the goods specified in this item when of less strength than the strength of proof, that no reduction or allowance shall be made in the measurement thereof for duty purposes below the strength of fifteen per cent. under proof.			
	Provided also, that when the goods specified in this item are of greater strength than the strength of proof, amount of duty payable thereon the measurement thereof and the shall be increased in proportion for any greater strength than the strength of proof.			
	Provided further, that bottles and flasks and packages of gin, rum, whiskey and brandy of all kinds, and imitations thereof, shall be held to contain the following quantities (subject to the provisions for addition or deduction in respect of the degree of strength), viz.:—			
	Bottles, flasks and packages containing not more than three-fourths of a gallon per dozen, as three-fourths of a gallon per dozen;			
	Bottles, flasks and packages containing more than three-fourths of a gallon but not more than one gallon per dozen, as one gallon per dozen;			
	Bottles, flasks and packages containing more than one gallon but not more than one and one-half gallon per dozen, as one and one-half gallon per dozen;			
	Bottles, flasks and packages containing more than one and one-half gallon but not more than two gallons per dozen, as two gallons per dozen;			
	Bottles, flasks and packages containing more than two gallons but not more than two and four-fifths gallons per dozen, as two and four-fifths gallons per dozen;			
	Bottles, flasks and packages containing more than two and four-fifths gallons but not more than three gallons per dozen, as three gallons per dozen;			
	Bottles, flasks and packages containing more than three gallons but not more than three and one-fifth gallons per dozen, as three and one-fifth gallons per dozen.			
	Provided further, that bottles or phials of liquors for special purposes, such as samples not for sale to the trade, may be entered for duty according to actual measurement under regulations prescribed by the Minister of Customs.			
159	Spirits and strong waters of any kind, mixed with any ingredient or ingredients, as being or known or designated as anodynes, elixirs, essences, extracts, lotions, tinctures or medicines, or ethereal and spirituous fruit essences, n.o.p. per gallon	$3.00	$3.00	$2.40
	and.....30 p.c.		30 p.c.	30 p.c.
160	Alcoholic perfumes and perfumed spirits, bay rum, cologne and lavender waters, hair, tooth and skin washes, and other toilet preparations containing spirits of any kinds:—			
	(a) When in bottles or flasks containing not more than four ounces each .....60 p.c.		60 p.c.	50 p.c.
	(b) When in bottles, flasks or other packages containing more than four ounces each .....per gallon	$3.00	$3.00	$2.40
	and.....40 p.c.		40 p.c.	40 p.c.
161	Nitrous ether, sweet spirits of nitre and aromatic spirits of ammonia .....per gallon	$3.00	$3.00	$2.40
	and.....30 p.c.		30 p.c.	30 p.c.
162	Medicinal or medicated wines, including vermouth and ginger wine, containing not more than forty per cent. of proof spirits .....60 p.c.		60 p.c.	50 p.c.
168	Malt flour containing less than fifty per cent. in weight of malt; also extract of malt, fluid or not, including grain molasses—all articles in this item upon valuation without British or foreign excise duties, under regulations by the Minister of Customs....per pound	3 cents.	3 cents.	35 p.c.
	and.....	35 p.c.	35 p.c.	
220	All medicinal, chemical and pharmaceutical preparations, compounded of more than one substance, including patent and proprietary preparations, tinctures, pills, powders, troches, lozenges, syrups, cordials, bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters, essences and oils, n.o.p.:—			
	(a) When dry .....20 p.c.		25 p.c.	Same.
	(b) All others .....60 p.c.		60 p.c.	50 p.c.
	Provided that drugs, pill-mass and preparations, not including pills or medicinal plasters, recognized by the British or the United States pharmacopœia, or the French Codex as official, shall not be held to be covered by this item;			
	Provided also, that any article in this item containing more than forty per cent. of proof spirit shall be rated for duty at.....per gallon	$3.00	$3.00	$2.40
	and.....30 p.c.		30 p.c.	30 p.c.
248	Paints and colors, ground in spirits, and all spirit varnishes and lacquers .....per gallon	$1.25	$1.25	$1.00

GREAT BRITAIN AFTER ENEMIES' TRADE.

Colonials to Co-operate by Furnishing Particulars of German Imports.

The Colonial and Foreign Secretaries are sparing no efforts in supporting the movement which has been earnestly started for the expansion of British trade by capturing the markets overseas and elsewhere which Germany cannot now supply. Colonial Secretary Harcourt has addressed an important document to some of the more important colonies not possessing responsible government, requesting them to furnish full and up-to-date information respecting the principal imports into each colony from Germany, and as to the products of each colony hitherto exported to those countries. Samples to illustrate the particulars are also requested. For analysis of German export trade see supplement page 176.

NEW REGULATION UNDER THE CUSTOMS DUMPING CLAUSE.

The 7½% exemption allowance has been done away with, effective September 1st, 1914.

From September 1st special or dumping duty applies when the difference between the fair market value and the selling price of the goods exceeds 5% of their fair market value.

It is provided further that no exemption allowance shall apply to round rolled wire rods of iron or steel nor to articles of a class or kind made in Canada when admitted free of ordinary duty.

The Canadian Locomotive Company, of Kingston, Ont., has received a contract from the Canada Foundry Company, Toronto, for grey iron castings for ten locomotives. The company is now employing over four hundred hands, and states that this number will be augmented in the autumn.

SUDDEN DEATH OF JOHN B. ATCHISON.

John B. Atchison, head of the firm of Atchison & Company, Cornwall, Ontario, died from blood-poisoning on August 13th.

LEGISLATION

THE attention of manufacturers is drawn to the following Proclamations published in *The Canada Gazette* in its issues of the 6th and 7th August respectively:

I.

GEORGE THE FIFTH, by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, King, Defender of the Faith, Emperor of India.

To all to whom these presents shall come, or whom the same may in any wise concern:—

GREETING:

A PROCLAMATION.

CHAS. J. DOHERTY, Minister of Justice. } Whereas it is in and by section 291 of The Customs Act, chapter 48 of the Revised Statutes of Canada, 1906, enacted that the Governor-in-Council may, from time to time, prohibit the exportation or the carrying coastwise or by inland navigation, of arms, ammunition and gunpowder, military and naval stores, and any articles which the Governor-in-Council deems capable of being converted into or made useful in increasing the quantity of military or naval stores, provisions or any sort of victual which may be used as food by man;

And whereas it is in and by section 242 of the said Act further enacted that—If any goods, the exportation or carrying coastwise or by inland navigation of which is prohibited by the Act or by the Governor-in-Council under the authority of this Act, are exported, carried coastwise or by inland navigation, or water borne, or laden in any railway carriage or other vehicle for the purpose of being so exported or carried, they shall be seized and forfeited;

And whereas our Governor-General in Council deems it necessary and in the public interest that the exportation from Canada be prohibited as in the manner hereinafter set forth:

Now Know Ye that We do by these presents and by and with the advice of Our Privy Council for Canada, until We shall see fit otherwise to declare, that the exportation from Canada of the following articles to all foreign ports in Europe and on the Mediterranean and Black Sea, with the exception of those of France, Russia (except the Baltic ports), Spain and Portugal, be prohibited:

Aluminium; aluminium alloys; armor plating; armor quality castings and similar protective material; asbestos; cables, telegraph and telephone; camp equipment, articles of; cannon and other ordinance and parts thereof; carbolic acid; carriages and mountings for cannon and other ordinance and for machine guns, and parts thereof; coal, steam, large; compasses and parts thereof, including fittings such as binnacles; cresol; engine and boiler packings; explosives of all kinds; fuel, manufactured; implements and apparatus designed exclusively for the manufacture of munitions of war, for the manufacture or repair of arms, or of war material for use on land and sea; India rubber-sheet, vulcanized; manganese; mercury, mica; mineral jellies; mines, and parts thereof; molybdenum; nitrocresol; nitrates of ammonium; nitrates of potassium; nitrates of sodium; nitratoluol; nitric acid; picric acid and its components; rangefinders and parts thereof; rope and steel wire and hawsers; saltpetre; sounding machines and gear; steam vessels, lighters and barges of all descriptions; sulphur; sulphuric acid; swords, bayonets and other arms not being firearms and parts thereof; tin; tinplates; torpedo tubes; torpedoes and parts thereof; tungsten; vanadium; four-wheeled wagons capable of carrying one ton and over; two-wheeled carts capable of carrying 15 cwt. and over; harness and saddlery of all kinds; brass wire for long spans 450 lbs. per mile; horse and pony shoes; materials for telegraphs; field glasses and telephones; field glasses and telescopes; railway material, both fixed and rolling stock; men's marching and shooting boots; heliographs; portable forges; farriers', carpenters', wheelers' and saddlers' tools, and transport service sets; glycerine; alcohol as covering rectified spirits; uniform clothing and military equipment; accoutrements; walnut wood of scantling which can be made into rifle butts and fore-ends.

Of all which Our loving subjects and all others whom these presents may concern are hereby required to take notice and govern themselves accordingly.

In Testimony Whereof, We have caused these Our Letters to be made Patent, and the Great Seal of Canada to be hereunto affixed. Witness, etc.

II.

Whereas a state of war exists between Us and the German Emperor;

And whereas it is contrary to law for any person resident, carrying on business, or being in Our Dominions to trade or have any commercial intercourse with any person resident, carrying on business, or being in the German Empire, without Our permission;

And whereas it is therefore expedient and necessary to warn all persons resident, carrying on business, or being in Our Dominions of their duties and obligations towards Us, Our Crown and Government;

Now therefore, We have thought fit, by and with the advice of Our Privy Council, to issue this Our Royal Proclamation, and we do hereby warn all persons resident, carrying on business, or being in Our Dominions;

Not to supply to or obtain from the said Empire any goods, wares or merchandise, or to supply to or obtain the same from any person resident, carrying on business, or being therein, nor to supply to or to obtain from any person any goods, wares or merchandise for or by way of transmission to or from the said Empire, or to or from any person resident, carrying on business, or being therein, nor to trade in or carry any goods, wares or merchandise destined for or coming from the said Empire, or for or from any person resident, carrying on business, or being therein;

Nor to permit any British ship to leave for, enter, or communicate with any port or place in the said Empire;

Nor to make or enter into any new marine, life, fire or other policy or contract of insurance with or for the benefit of any person resident, carrying on business, or being in the said Empire, nor under any existing policy or contract of insurance to make any payment to or for the benefit of any such person in respect of any loss due to the belligerent action of His Majesty's forces or of those of any ally of His Majesty;

Nor to enter into any new commercial, financial or other contract or obligation with or for the benefit of any person resident, carrying on business, or being in the said Empire;

And We do hereby further warn all persons that whoever in contravention of the law shall commit, aid or abet any of

the aforesaid acts shall be liable to such penalties as the law provides;

And We hereby declare that any transactions to, with or for the benefit of any person resident, carrying on business, or being in the said Empire which are not treasonable and are not for the time being expressly prohibited by Us either by virtue of this Proclamation or otherwise, and which but for the existence of the state of war aforesaid would be lawful, are hereby permitted;

And We hereby declare that the expression "person" in this Proclamation shall include any body of persons corporate or unincorporate, and that where any person has or had an interest in houses or branches of business in some other country as well as in Our Dominions, or in the said Empire, this Proclamation shall not apply to the trading or commercial intercourse carried on by such person solely from or by such houses or branches of business in such other country.

Given at Our Court at Buckingham Palace this fifth day of August in the year of Our Lord one thousand nine hundred and fourteen, and in the fifth year of Our reign.*

* NOTE.—War having been declared between Austria and the Empire this Proclamation has subsequently been extended to Austria.

COMMERCIAL TRANSACTIONS WITH HOSTILE POWERS.

"On outbreak of war, debts due the enemy and enemy property on land may be confiscated, but modern practice, while it admits, makes no use of the right. No modern state would confiscate its debts or public obligations due to enemy subjects.

"War, as between the citizens or subjects of the respective belligerents, *ipso facto* dissolves all commercial partnerships and all contracts wholly executory and requiring for their continued existence commercial intercourse or communication; and while it does not abrogate, yet it suspends all other existing contracts and obligations and the remedies thereon, and renders all contracts, with rare exceptions, entered into pending hostilities illegal and void."—Article on International Law in International Encyclopædia.

CONTRABAND OF WAR

Many Articles Which are Considered Contraband When Having Belligerent Destination and Purpose. Official List from the Customs Department

CONSIDERABLE interest has been evoked in the subject of contraband by the present European conflict. To manufacturers engaged in foreign export the subject is extremely important. From a legal standpoint it presents one of the most difficult phases of international law. Apart from the fact that the expression "international law" is in itself an anomaly, as the prime requisite of a law is a sovereign authority to secure its enforcement, a clear definition of what is and what is not contraband of war has not yet been established. In the course of history, however, certain principles based on international understandings and conventions have been evolved from which one may adduce a fairly succinct statement on the law of contraband. But in the last analysis a decision to adhere to or ignore what is known as the law of nations always rests with the combatants.

Definition of Contraband.

The word "contraband" is derived from the Latin "contra" meaning "against" and the Italian "bando" meaning "edict." Contraband may be defined as "such goods as are prohibited to be imported or exported, bought or sold, either by the laws of a particular state or by several treaties; also it is a term applied to distinguish that class of commodities which neutrals are not allowed to carry during war to a belligerent power." It will be observed that certain commodities carried by neutrals are contraband as well as those goods the export of which is forbidden by the belligerent countries.

Commodities for the purpose of war have been divided into three classes. First, those articles which are directly and primarily manufactured for the purposes of war, such as firearms, cannon, powder, etc. Such goods are known as absolute contraband. Second, those articles which may be used either for war or for peace, such as coal, grain, foodstuffs, etc. Articles of this nature are termed conditional contraband. A third class of articles which are manufactured exclusively for peaceful purposes are placed in the so-called free list and are not subject to seizure by belligerent nations unless carried along with contraband goods and thus infected by what Lord Stowell epitomised as the "contagion of contraband."

Conditional Contraband Indefinite.

Goods classed as absolute contraband have been long established and clearly defined, but no such assurance can be given as to goods of a conditional contraband nature. The wide scope for a rigid application of the rule of conditional contraband is readily apparent. Practically any goods manufactured for peaceful purposes might give assistance to the enemy and be designated "sinews of war." The work and efforts of the delegates to the London and Hague Peace Conferences have been largely directed to formulating a workable enumeration of commodities which might be declared conditional contraband. Unfortunately nothing definite in this direction as between all the powers has up to the present been accomplished.

The two articles which have naturally received the most attention are foodstuffs and coal. With regard to foodstuffs the English courts have decided that the port to which the goods are to be shipped is the criterion in determining whether the goods are to be regarded as contraband or not. If shipped to a port in which armament is pending or has been completed the ship is liable to arrest and the cargo can be confiscated. If, on the other hand, the ship is bound to a port where no warlike preparations are being undertaken, a belligerent can only detain the cargo, remitting the shipper the same price that he was to receive from the enemy. With regard to coal, the authorities on international law are almost unanimously of the opinion that coal is only contraband when it is being furnished directly to the enemy for hostile purposes. The current theory, then, that the shipment of coal from the Pennsylvania coal fields into Canada is a violation of neutrality on the part of the United States is based on false premises and cannot be seriously entertained.

The following passage from Scott's Treatise on the Hague Peace Conferences is significant: "It is to be noted that contraband is neutral property, and, as distinguished from enemy property, is not liable to seizure unless exclusively or properly susceptible of warlike use, and its shipment to the enemy

enables him to prosecute and continue the war. Trade in contraband is not forbidden by international law to the neutral subject or citizen, but its unneutral character is so far recognized that the belligerent may intercept and confiscate it. The trade is thus permitted, but subject to the risk of the shipper. The gist of the offence is the injury to the belligerent from the nature of the goods conveyed."

The Declaration of London, 1909.

Great Britain has expressed its intention of being governed by the articles of the Declaration of London throughout the present war. France and Russia are said to have given similar assurances. The Declaration of London was the result of a Peace Conference held at the invitation of England in London in the years 1908 and 1909. Nearly all the powers were represented by delegates. The real object of the conference was to arrive at a concert of opinion on the subject of conditional contraband touching incidentally the kindred topics of the right of search and blockade. Numerous meetings were held, and the views of the delegates crystallized and put in the form of a document known as the Declaration of London. While endorsed by all the delegates attending the conference, the Declaration had not at the outbreak of hostilities been ratified by all the powers represented.

The most important provisions of the Declaration from a manufacturer's standpoint are those which determine the right of capture. The articles governing the seizure of *absolute* and *conditional* contraband read as follows:

"Articles of *absolute contraband* are liable to capture as contraband of war when destined to territory belonging to or occupied by the enemy, or to the fleets or armies of the enemy.

"Proof of the destination is complete in the following cases:

"(*a*) When the goods are documented for discharge in an enemy port, or for delivery to the armed forces of the enemy.

"(*b*) When the vessel is to call at enemy ports only, or when she is to touch at an enemy port or meet the armed forces of the enemy before reaching the neutral port for which the goods in question are documented.

"Articles of *conditional contraband* are only liable to capture as contraband of war when shown to be destined for the use of the fleets or armies of the enemy or of a Government Department of the enemy State."

The intention of the allies to abide by this Declaration will go far towards dispelling that commercial uneasiness as to the law of contraband which always exists when two or more nations are at war.

WHAT IS CONTRABAND?

The following list of articles, which are considered contraband of war when having belligerent destination and purpose, has been furnished to INDUSTRIAL CANADA by the Customs Department, Ottawa:

Absolute Contraband.

1. Arms of all kinds, including arms for sporting purposes, and their distinctive and component parts.
2. Projectiles, charges, and cartridges of all kinds, and their distinctive and component parts.
3. Powder and explosive specially prepared for use in war.
4. Gun-mountings, limber boxes, limbers, military wagons, field forges, and their distinctive and component parts.
5. Clothing and equipment of a distinctive military character.
6. All kinds of harness of a distinctive military character.
7. Saddle, draught, and pack animals suitable for use in war.
8. Articles of camp equipment and their distinctive and component parts.
9. Armor plate.
10. Warships, including boats and their distinctive and component parts of such a nature that they can only be used on a vessel of war.
11. Aeroplanes, airships, balloons, and air craft of all kinds, and their component parts—together with accessories and articles recognizable as intended for use in connection with balloons, airships and air craft.
12. Implements and apparatus designed exclusively for the manufacture of munitions of war, for the manufacture or repair of arms, or war materials for use on land or sea.

Subject to the addition of other articles.

Conditional Contraband.

1. Foodstuffs.
2. Forage and grain, suitable for feeding animals.
3. Clothing, fabrics for clothing, and boots and shoes, suitable for use in war.
4. Gold and silver in coin or bullion, paper money.
5. Vehicles of all kinds available for use in war, and their component parts.
6. Vessels, craft, and boats of all kinds, floating docks, parts of docks, and their component parts.
7. Railway material, both fixed and rolling stock, and material for telegraph, wireless telegraph, and telephones.
8.
9. Fuel, lubricants.
10. Powder and explosives not specially prepared for use in war.
11. Barbed wire and implements for fixing and cutting same.
12. Horseshoes and shoeing materials.
13. Harness and saddlery.
14. Field glasses, telescopes, chronometers, and all kinds of nautical instruments.

Subject to the addition of other articles.

SAFETY FIRST.

The Second International Safety Exposition will be held in New York, December 12th to 19th, at Grand Central Palace, under the direction of the American Museum of Safety. The purpose of the exposition is to show how the health and safety of the worker is being looked after in the various American industries, manufacturing, trades, railroading, building, business and engineering, as well as the methods which have been adopted for the welfare and education of employees. A large portion of the exposition will be devoted to the timely subject of safety at sea; devices will be shown which will prevent recurrence of the frightful sea tragedies of the past few months. A large number of interesting and instructive government and foreign exhibits will also have place. The scope of the exposition will be limitless, embracing everything devoted to health, sanitation, safety, accident prevention, education, welfare and the advancement of the science of industry.

BRITISH WAR OFFICE BUYING HOISTS.

The British War Office has purchased from the Herbert Morris Crane and Hoist Company a very large quantity of Lifting and Shifting Machinery to be used directly with the preparation of war materials, and in order to prevent delay in the arrival of the goods the cases all bear tags reading "On War Service."

ROUTES BY WHICH CANADIAN MANUFACTURERS CAN SHIP GOODS TO SOUTH AMERICA

Shipping Routes from New York to South American Ports by Countries

SINCE the outbreak of war trade between North America and Europe has been seriously disturbed. Consequently, United States manufacturers, through their various organizations, and individually, are organizing a vigorous campaign to sell more of their goods in South America. Canadian manufacturers, being similarly affected, are also hoping to find markets to replace those which have been lost.

The Transportation Department of the C.M.A. has compiled the following list of shipping routes to South America as they existed before the war. While the presence of hostile ships has disorganized them to some extent, there is every reason to believe that the control of the sea by the British navy will render them reasonably safe. Detailed information as to sailings, rates, etc., will be furnished upon application by the Transportation Department.

SHIPPING ROUTES FROM NEW YORK.

Argentine Republic.

Average time, New York to Buenos Aires, 27 days.

1. Lamport & Holt Line (Busk & Daniels, General Agents, Produce Exchange, New York). British Steamers—Sailings: From Pier 8, Brooklyn, Wall St. Ferry. For Buenos Ayres three times a month; La Plata and Rosario about once a month.

2. Norton Line (Norton & Son, Produce Exchange, New York). British steamers—Sailings: from Pier 2, Bush Terminal, 49th St., Brooklyn. For Buenos Ayres, La Plata and Rosario, once or twice a month. Occasional direct sailings for Bahia, Blanca and Campana.

3. Barber Line (Uruguayan-Argentine service) (Barber & Co., Inc., 17 Battery Place, N.Y.). British steamers—Sailings: From Pier 36, Atlantic Dock, Brooklyn. For La Plata, Buenos Aires and Rosario about three times a month. Occasional direct sailings for Bahia, Blanca.

4. Houston Line (R. P. Houston & Co., 17 Battery Place, N.Y.). British steamers—Sailings: From Pier 38, Atlantic Dock, Brooklyn. For La Plata, Buenos Aires and Rosario about twice a month. Occasional direct sailings for Bahia, Blanca.

5. Prince Line (Paul F. Gerhard & Co., Agents, 10 Bridge St., New York City). British steamers—Sailings: From Pier 4, Bush Terminal, 45th St., Brooklyn. For Buenos Aires and Rosario direct about the 10th and 25th of each month. For La Plata direct occasionally.

6. American & Rio Plata Line (Houlder, Weir & Boyd, Inc., 24 State St., New York). British steamers—Sailings: From American Dock Terminal, Tompkinsville, Staten Island. For Buenos Aires and La Plata about twice a month. Occasional direct sailings for Bahia Blanca.

7. New York and South American Line (John W. Ryan, Agent, 11 Broadway, N.Y.). British steamers—Sailings: From Pier 36, Atlantic Dock, Brooklyn. For Bahia Blanca about monthly for places in Patagonia (Rio Gallegas, etc.), transhipment is made at Punta Arenas.

8. Merchants' Line (N. Y. & Pac. SS. Company, W. R. Grace & Co., Agents, Hanover Square, N.Y.). British steamers—Sailings: From Pier 33, Atlantic Dock, Brooklyn. For Bahia Blanca and Port Madryn about once a month; also for Punta Arenas, Chile, about every two weeks, then by connecting steamers to ports in Southern Argentina.

9. West Coast Line (Wessel, Duval & Co., 25 Broad St., N.Y.). British Steamers—Sailings: For Punta Arenas (Chile), about once a month, thence by connecting steamers to southern ports in Argentina..

Bolivia.

No through Bills of Lading are issued to points in Bolivia. Shipments are made via ports in Chile, Peru, Brazil and Argentina. For details as to sailings see routes given for the above-mentioned countries.

Brazil.

Average time New York to Para, eleven to fourteen days.
Average time New York to Rio Janeiro, twenty days.

1. The Booth Steamship Co., Limited (Booth & Co., Agents, 17 Battery Place, N.Y.). British steamers—Sailings: From Pier 4, Martin's Stores, Brooklyn. For Para two or three times a month; Manaos, once or twice a month; Maranham and Ceara, about 25th of each month; Paranhyba and Natal, about 25th of each alternate month.

2. Lamport & Holt Line (Busk & Daniels, General Agents, Produce Exchange, N.Y.). British and Belgian steamers—Sailings: From Pier 8, Brooklyn, Wall St., Ferry. For Bahia, Rio de Janeiro and Santos, about three times a month; Pernambuco. Maceio, Cabedello, Victoria and other ports at irregular intervals, or by transhipment at most convenient port.

3. Prince Line (Paul F. Gerhard & Co., General Agents, 10 Bridge St., N.Y.). British steamers—Sailings: From Pier 4, Bush Terminal, 45th St., Brooklyn, N.Y. For Rio de Janeiro and Santos, 10th and 25th of each month; Pernambuco and Bahia, 25th of each month; Maceio, Bahia, Natal, Cabadello, Victoria, Antonina, Florianopolis (Desterro), Parangua, and Sao Francisco do Sul, at irregular intervals, or freight will be transhipped at the most convenient port.

4. Lloyd Brazileiro (Brazilian SS. Line, Joseph Slechta, General Agent, 17 State St., N.Y.). Brazilian and chartered steamers—Sailings: From Pier 5, Bush Terminal, 43rd St., Brooklyn. For Rio de Janeiro and Santos, direct about the 12th of each month; Clara, Natal, Cabadello, Pernambuco and Maceio, about 20th of each month; other ports direct occasionally; otherwise by transhipment at the most convenient port.

5. Hamburg South American Steamship Co. and Hamburg-American Line (Funch, Edye & Co., Agents, 10 Bridge St., N.Y.). German steamers—Sailings: From Pier 3, Bush Terminal, 47th St., Brooklyn. For Pernambuco, Maceio, Bahia, Rio de Janeiro, Santos and Rio Grande du Sol, about once a month; Natal, Cabedello, Victoria, Antonina, Florianopolis (Desterro), Parangua and Sao Francisco do Sul, at irregular intervals, or freight will be transhipped at the most convenient port.

6. United States and Brazil Steamship Line (Arthur R. Lewis, Agent, 27 William St., N.Y.). American steamers—Sailings: From Pier 7 N.R., foot of Rector St. (Truck freight) steamers load in Brooklyn. For Rio de Janeiro and

Santos, about the 15th of each month; for other ports if sufficient cargo offers.

British Guiana.

Average time New York to Demerara, 12 to 14 days.

1. Quebec Steamship Co. (A. E. Outerbridge & Co., General Agents, 29 Broadway, New York). British steamers—Sailings: From Pier 47 N.R., W. 10th St., New York. (Occasionally loading in Brooklyn during April and May). For Demerara (Georgetown), every alternate Saturday.

2. Trinidad Line (Trinidad Shipping and Trading Co., Ltd., 29 Broadway, N.Y.). British steamers—Sailings: From Pier 24, Robinson Stores, Brooklyn. For Demerara (Georgetown), about every ten days.

3. Royal Dutch West India Mail (L7 State St., New York). Dutch steamers—Sailings: From Pier 3, Bush Terminal, 47th St., Brooklyn. For Demerara (Georgetown), every alternate Friday.

4. New York and Demerara Steamship Line (L. W. & P. Armstrong, Agents, 106 Wall St., New York). Chartered steamers (no regular pier). Sailings: For Demerara (Georgetown), about every five weeks.

Chile.

Average time New York to Valparaiso (via Panama), 35 days; average time New York to Valparaiso (via direct steamer), 43 days.

1. Merchants' Line (New York and Pacific Steamship Co., W. R. Grace & Co., Agents, Hanover Sq., N.Y.). British steamers—Sailings: From Pier 33, Atlantic Dock, Brooklyn. For all the principal ports (via Straits of Magellan), about every two weeks.

2. West Coast Line (Wessel, Duval & Co., 25 Broad St., New York). British steamers—Sailings: For all principal ports (via Straits of Magellan), about once a month.

3. New York and South American Line (Mr. John W. Ryan, Agent, 11 Broadway, N.Y.). British steamers—Sailings: From Pier 36, Atlantic Dock, Brooklyn. For principal ports in Chile (via Straits of Magellan) about monthly.

4. Panama Railroad Steamship Line, 24 State St., New York. American steamers—Sailings: From Pier 67 N.R., W 27th St., New York. For Colon (Cristobal), Panama, thence by rail to Panama, thence by steamer to ports in Chile, about six times a month.

5. Hamburg-American Line (Atlas Service), 45 Broadway, N.Y. German steamers—Sailings: From Pier 65 N.R., W. 25th St., New York. For Colon (Panama), every Saturday, thence by rail to Panama, thence by steamer to ports in Chile.

6. Royal Mail Steam Packet Co. (Sanderson & Son, General Agents, 22 State St., New York). British steamers—Sailings—From Pier 42 N.R., Morton St., New York. For Colon (Panama), every alternate Saturday, thence by rail to Panama, thence by steamer to ports in Chile.

7. United Fruit Co. Steamship Service, 17 Battery Place, New York. British steamers—Sailings: From Piers 15 and 16 E.R., Burling Slip, New York. For Colon (Panama), every Wednesday and Saturday, thence by rail to Panama, thence by steamer to ports in Chile.

Colombia.

Average time New York to Buenaventura, 10 days; average time New York to Cartagena, 11 days; average time New York to Savanilla, 9 days.

1. Hamburg-American Line (Atlas Service), 45 Broadway, New York. German steamers—Sailings: From Pier 65 N.R., W. 25th St., New York. For Savanilla (Puerto Colombia) and Cartagena, every Thursday; Santa Marta, alternate Saturdays; Colon (Panama), every Saturday, thence by rail to Panama, thence by steamers to Buenaventura and Tumaco.

2. Panama Railroad Steamship Line, 24 State St., New York. American steamers—Sailings: From Pier 67 M.R., W. 27th St., New York. For Colon (Cristobal), Panama, about six times a month, thence by rail to Panama, thence by steamer to Buenaventura and Tumaco.

3. Royal Mail Steam Packet Co. (Sanderson & Son, General Agents, 22 State St., New York). British steamers—Sailings: From Pier 42 M.R., Morton St., New York. For Colon (Panama), Cartagena and Savanilla (Puerta Colombia), every alternate Saturday. At Colon steamers connect by rail for Panama, thence by steamers to Buenaventura and Tumaco.

4. United Fruit Co. Steamship Service, 17 Battery Place, New York. British steamers—Sailings: From Piers 15 and 16 N.R., Burling Slip, New York. For Cartagena, Savanilla (Puerto Colombia) and Santa Marta, every Wednesday. Also for Colon (Panama), every Wednesday and Saturday, thence by rail to Panama, thence by steamer to Buenaventura and Tumaco.

Curacao.

1. Red "D" Line (Bliss, Dallett & Co., General Managers, 82 Wall St., N.Y.). American steamers—Sailings: From Pier 11, Brooklyn, adjoining Wall St. Ferry. For Curacao (Willemstadt), every alternate Wednesday.

2. Royal Dutch West India Mail Line (17 State St., New York). Dutch steamers—Sailings: From Pier 3, Bush Terminal, 47th St., Brooklyn. For Curacao (Willemstadt), every alternate Friday.

Dutch Guiana.

Average time New York to Paramaribo, 10 days.

1. Royal Dutch West India Mail Line (Funch, Edye & Co., Frt. Agents, 17 State St., New York). Dutch steamers—Sailings: From Pier 3, Bush Terminal, 47th St., Brooklyn. For Surinam (Paramaribo), every alternate Friday.

2. New York & Demarara Steamship Co. (L. W. & P. Armstrong, Agents, 106 Wall St., New York). Chartered steamers (no regular pier)—Sailings: For Demerara (British Guiana), about every five weeks, thence by connecting steamer to Surinam (Paramaribo).

3. Quebec Steamship Co. (A. E. Outerbridge & Co., General Agents, 29 Broadway, New York). British steamers—Sailings: From Pier 47 N.R., W. 10th St., New York, occasionally loading in Brooklyn in April and May. For Demerara (British Guiana), every alternate Saturday, thence by connecting steamer to Surinam (Paramaribo).

Ecuador.

Average time New York to Guayaquil (via Panama), 14 days; average time New York to Guayaquil (via Straits of Magellan), 65 days.

1. Merchants' Line (N.Y. & Pacific Steamship Co., Ltd., W. R. Grace & Co., Agents, Hanover Sq., New York). British steamers—Sailings: From Pier 33, Atlantic Dock, Brooklyn. For Guayaquil direct (via Straits of Magellan), every three or four weeks; other ports direct by special arrangement or by transhipment at Guayaquil.

2. Panama Railroad Steamship Line, 24 State St., New York. American steamers—Sailings: From Pier 67 N.R., W. 27th St., New York. For Colon (Cristobal), Panama, six times a month, thence by rail to Panama, thence by steamer to ports in Ecuador.

3. Hamburg-American Line (Atlas Service), 45 Broadway, New York. German steamers—Sailings: From Pier 65 N.R., W. 25th St., New York. For Colon (Panama), every Saturday, thence by rail to Panama, thence by steamer to ports in Ecuador.

4. Royal Mail Steam Packet Co. (Sanderson & Son, General Agents, 22 State St., New York). British steamers—Sailings: From Pier 42 N.R., Morton St., New York. For Colon (Panama), every alternate Saturday, thence by rail to Panama, thence by steamer to ports in Ecuador.

5. United Fruit Co. Steamship Service, 17 Battery Place, New York. British steamers—Sailings: From Piers 15 and 16 E.R., Burling Slip, New York. For Colon (Panama), every Wednesday and Saturday, thence by rail to Panama, thence by connecting steamer to ports in Ecuador.

French Guiana.

Average time New York to Cayenne, 12 to 19 days.

1. New York and Demerara Steamship Line (L. W. & P. Armstrong, Agents, 106 Wall St., New York). Chartered steamers (no regular piers).—Sailings:For Demerara (British Guiana), about every five weeks, thence by connecting steamer to Cayenne.

2. Quebec Steamship Co. (A. E. Outerbridge & Co., Agents, 29 Broadway, N.Y.). British steamers—Sailings: From Pier 47 N.R., W. 10th St., New York, occasionally loading in Brooklyn during April and May. For Demerara (British Guiana) or Barbadoes (W.I.), every alternate Saturday, thence by connecting steamer to Cayenne.

3. Trinidad Line (Trinidad Shipping & Trading Co., Ltd., 29 Broadway, New York). British steamers—Sailings: From Pier 24, Robinson's Stores, Brooklyn. For Port of Spain (Trinidad), every 10 to 14 days, thence by connecting steamers to Cayenne.

Peru.

Average time New York to Callao (via Panama), 12 to 20 days; average time New York to Callao (via Straits of Magellan), 50 days.

1. Merchants' Line (N.Y. & Pacific Steamship Co., Ltd., W. R. Grace & Co., Agents, Hanover Sq., New York). British steamers—Sailings: From Pier 33, Atlantic Dock, Brooklyn, via Hamilton Ferry. For principal ports (via Straits of Magellan), about every two weeks.

2. West Coast Line (Wessel, Duval & Co., 25 Broad St., New York). British steamers—Sailings: For principal ports (via Straits of Magellan), about once a month.

3. New York & South American Line (Mr. J. W. Ryan, Agent, 11 Broadway, New York). British steamers—Sailings: From Pier 38, Atlantic Dock, Brooklyn. For principal ports in Peru via Straits of Magellan.

4. Panama Railroad Steamship Line, 24 State St., New York. American steamers—Sailings: From Pier 67 N.R., W. 27th St., New York. For Colon (Cristobal), Panama, five or six times a month; thence by rail to Panama, thence by steamer to ports in Peru.

5. Hamburg-American Line (Atlas Service), 45 Broadway, New York. German steamers—Sailings: From Pier 65 N.R., W. 25th St., New York. For Colon (Panama), every Saturday, thence by rail to Panama, thence by steamer to ports in Peru.

6. Royal Mail Steam Packet Co. (Sanderson & Son, General Agents, 22 State St., New York). British steamers—Sailings: From Pier N.R., Morton St., New York. For Colon (Panama), every alternate Saturday, thence by rail to Panama, thence by steamer to ports in Peru.

7. United Fruit Co. Steamship Service, 17 Battery Place, New York. British steamers—Sailings: From Piers 15 and 16 E.R., Burling Slip, New York. For Colon (Panama), every Wednesday and Saturday, thence by rail to Panama, thence by connecting steamer to ports in Peru.

8. The Iquitos S.S. Co., Limited (Booth & Co., Agents, 17 Battery Place, N.Y.). British steamers—Sailings: From Pier 4, Martins' Stores, Brooklyn. For Iquitos direct about every two months.

Uruguay.

Average time New York to Montevideo, 25 days.

1. Lamport & Holt Line (Busk & Daniels, General Agents, 11 Produce Exchange, New York). British steamers—Sailings: From Pier 8, Brooklyn, Wall St. Ferry. For Montevideo, about twice a month; for other ports by transhipment at Montevideo.

2. Norton Line (Norton & Son, Produce Exchange, New York). British steamers—Sailings: From Pier 2, Bush Terminal, 49th St., Brooklyn. For Montevideo, about twice a month; for other ports by transhipment.

3. Barber Line (Uruguayan-Argentine Service), Barber & Co., Inc., 17 Battery Place, N.Y.). British steamers—Sailings: From Piers 36 and 37, Atlantic Dock, Brooklyn. For Montevideo, about three times a month; for other ports by transhipment at Montevideo.

4. Houston Line (R. P. Houston & Co., 17 Battery Place, New York). British steamers—Sailings: From Pier 38, Atlantic Dock, Brooklyn. For Montevideo, about twice a month; for other ports by transhipment at Buenos Aires (Argentine).

5. Prince Line (Paul F. Gerhard & Co., 10 Bridge St.), New York. British steamers—Sailings: From Pier 4, Bush Terminal, 45th St., Brooklyn. For Montevideo on the 10th and 25th of each month; for other ports by transhipment at Montevideo.

6. American & Rio Plata Line (Houlder, Weir & Boyd, Inc., 24 State St., New York). British steamers—Sailings: From American Docks, Tompkinsville, Staten Island. For Montevideo, once or twice a month; for other ports by transhipment at Montevideo.

Venezuela.

Average time New York to La Guayra (via Red "D"), 7 days; average time New York to La Guayra (via Royal Dutch Line), 18 days; average time New York to Puerto Cabello (via Red "D" Line), 10 days; average time New York to Puerto Cabello (via Royal Dutch Line), 17 days.

1. Red "D" Line (Bliss, Dallett & Co., 82 Wall St., New York). American steamers—Sailings: From Pier 11, Brooklyn, adjoining Wall St. Ferry. For La Guayra and Maracaibo, every Wednesday; freight for Maracaibo every alternate trip; Puerto Cabello, every alternate Wednesday; Coro (La Vela de), every alternate Wednesday; transhipment at Curacao (Dutch West Indies).

2. Royal Dutch West India Mail Line, 17 State St., New York. Dutch steamers—Sailings: From Pier 3, Bush Terminal, 47th St., Brooklyn. For Puerto Cabello, La Guayra, Guanta, Cumana and Carupano. For Guanta and Cumana freight is carried only on alternate trips.

3. Royal Mail Steam Packet Co. (Sanderson & Son, 22 State St., New York). British steamers—Sailings: From Pier 42 N.R., Morton St., New York. For Trinidad (W.I.), every alternate Saturday; thence by company's steamers every alternate Tuesday for Carupano, Porlarmar, La Guayra and Puerto Cabello.

4. Trinidad Line (Trinidad Shipping & Trading Co., Ltd., 29 Broadway, New York). British steamers—Sailings: From

Pier 24, Robinson Stores, Brooklyn. For Trinidad (W.I.), every 10 to 14 days, thence by connecting steamer to Ciudad, Bolivar (Angostura).

5. Scandella Line (M. A. De Leon & Co., 24 State St., New York). Chartered steamer (no regular pier).—Sailings: For La Guayra and Ciudad, Bolivar, about every two months.

SHIPPING ROUTES FROM NEW YORK TO WEST INDIAN PORTS.

Bahama Islands.

Average time New York to Nassau, 3 days.

1. New York & Cuba Mail Steamship Company (Pier 14 E.R., New York). American steamers—Sailings: from Piers 13 and 14 E.R., Wall and Pine Sts., N.Y. For Nassau (New Providence), every alternate Friday.

2. Hamburg-American Line (Atlas Service). German steamers—Sailings: From Pier 65 N.R., W. 25th St., New York. For Inagua, every Thursday; Fortune Island, every Saturday.

3. Clyde Steamship Co. (West India Line), 11 Broadway, New York. American steamers—Sailings: From Pier 34, Atlantic Dock, Brooklyn. For Turk's Island (Grand Turk), every alternate Saturday.

Cuba.

Average time New York to Havana, 4 days; average time New York to Cienfuegos, 9 days.

1. New York & Cuba Mail Steamship Co (Piers 13 and 14 E.R., New York). American and Cuban steamers—Sailings: From piers foot Wall and Pine Sts., New York, and piers 16, 17 and 18, Brooklyn. For Havana, every Thursday and Saturday, with occasional extra freight sailings; Santiago de Cuba, Cienfuegos, Guantanamo and Manzanillo, about every ten days.

2. Munson Steamship Line, 82 Beaver St., New York. Cuban steamers—Sailings: From Pier 9 E.R., Old Slip, New York. For Caibarien, Cardenas, Gibara, Matanzas, Nipe, Nuevitas and Sagua la Grande, every alternate Wednesday; Puerto Padre, every fourth Wednesday.

3. Royal Mail Steam Packet Co. (Sanderson & Son, 22 State St., N.Y.). British steamers—Sailings: From Pier 42 N.R., Morton St., New York. For Nipe Bay (Antilla), every Saturday, connecting for all points on Cuba Railroad and connecting lines.

4. Hamburg-American Line (Atlas Service), 45 Broadway, New York. German steamers—Sailings: From Pier 65 N.R., W. 25th St., New York. For Santiago de Cuba, every Saturday.

5. American & Cuban Steamship Line, 27 William St., N.Y. British and Norwegian steamers—Sailings: From Pier 7 N.R., Rector St., New York. For Havana, weekly; Guantanamo, Santiago, Manzanillo, Cienfuegos, Matanzas, Cardenas, Sagua La Grande and Carbarien, every three to five weeks.

6. Compania Transatlantic (M. Caragol, Freight Agent, 127 Water St., New York). Spanish steamers—Sailings: From Pier 8 E.R., near old slip, New York. For Havana, 11th or 12th of each month.

7. Cuban Steamship Line (Luiz Odriozola Line), (Williams Shipping Agency, 24 Stone St., N.Y.). Cuban steamers—Sailings: From New York, weekly in connection with steamers to Havana and Cienfuegos, thence by company's steamers for south side ports and Isle of Pines.

Haiti.

1. Hamburg-American Line (Atlas Service), 45 Broadway New York. German steamers—Sailings: From Pier 65 N.R., W. 25th St., New York. For Port au Prince, every Thursday; Port de Paix, Cape Haiti, Gonaives, St. Marc, Petit Goave, Miragoane, Jeremie, Aux Cayes and Jacmel, every alternate Thursday.

2. Royal Dutch West India Mail Line (Funch, Edye & Co., 17 State St., N.Y.). Dutch steamers—Sailings: From Pier 3, Bush Terminal, 47th St., Brooklyn. For Port au Prince and Jeremie, every alternate Friday; St. Marc, Petit Goave, Aux Cayes and Jacmel, every fourth Friday; Aquin, every sixth Friday.

Jamaica.

Average time New York to Kingston, 6 days.

1. Hamburg-American Line (Atlas Service), 45 Broadway, N.Y. German steamers—Sailings: From Pier 65 N.R., W. 25th St., New York. For Kingston, every Saturday; Port Antonio direct, alternate Fridays and Saturdays during the tourist season (January to March, inclusive); Montego Bay, every alternate Saturday; other ports by transhipment at Kingston.

2. Royal Mail Steam Packet Co. (Sanderson & Son, 22 State St., New York). British steamers—Sailings: From Pier 42 N.R., Morton St., New York. For Kingston, every alternate Saturday; other ports by transhipment at Kingston.

3. United Fruit Co. Steamship Service, 17 Battery Place, New York. British steamers—Sailings: From Piers 15, 16 E.R., Burling Slip, New York. For Kingston, every Wednesday and Saturday, connecting with company's steamers for all outports; Port Antonio, Montego Bay and Savanna-La-Mar direct, alternate Fridays, taking freight for other north side ports by special arrangement; Port Antonio, Port Maria and St. Ann's Bay direct, alternate Tuesdays.

4. Atlantic Fruit Co., 11 Broadway, New York. Chartered steamers—Sailings: From Pier 9 E.R., foot of old slip, N.Y. For principal ports in Jamaica, about weekly; freight accepted on some trips only.

Leeward Islands.

Average time from New York to St. Thomas, 6 days; average time from New York to Antiqua and St. Kitts, 7 days.

1. Quebec Steamship Company (A. E. Outerbridge & Co., 29 Broadway, N.Y.). British steamers—Sailings: From Pier 47 N.R., W. 10th St., N.Y., occasionally loading in Brooklyn during April and May. For St. Thomas, St. Croix, St. Kitts, Antiqua, Gaudeloupe and Dominica, every alternate Saturday, with occasional extra sailings; Montserrat direct, at irregular intervals, or by transhipment at Antiqua.

2. New York & Demerara Steamship Co. (L. W. & P. Armstrong, 106 Wall St., N.Y.). Chartered steamers (no regular pier)—Sailings: for St. Kitts and Gaudeloupe, about every five weeks.

3. Royal Mail Steam Packet Co. (Sanderson & Son, 22 State St., N.Y.). British steamers—Sailings: From Pier 42 N.R., Morton St., N.Y. For Port of Spain (Trinidad), every alternate Saturday, thence by company's connecting steamer to the various islands.

Porto Rico.

Average time New York to San Juan, 5 days; average time New York to Ponce, 8 or 9 days.

1. New York & Porto Rico Steamship Co. (F. D. Mooney, V.P. and G.M., 11 Broadway, New York). American steamers—Sailings: From Pier 35, Atlantic Docks, Brooklyn. For San Juan, Ponce and Mayaguez, every Saturday; Arecibo, Aguadilla and Arroyo, fortnightly on Thursdays; Humacao, Fajardo, Jobos, Guanica and Vieques (Porto Mulas), occasionally by direct steamers and by transhipment to company's steamers at San Juan every week.

2. Insular Line (Wm. E. Peck & Co., 140 Pearl St., New York). American steamers—Sailings: From Pier 27, Union Stores, Brooklyn. For San Juan, Mayaquez and Pance, every Saturday; Arroyo and Aguadilla, twice a month; Fajardo, Humacao, Vieques, Arecibo, Guayama, Jobos, Guanica, Mannabo, Naguabo and Yabucoa, by direct steamers, also by transhipment.

3. Red "D" Line (Bliss, Dallett & Co., 82 Wall St., New York). American steamers—Sailings: From Pier 11, Brooklyn, adjoining Wall St. Ferry. For San Juan and Mayaguez, on alternate Wednesdays.

4. A. H. Bull Steamship Co. (A. H. Bull & Co., 10 Bridge St., New York). American steamers—Sailings: From Pier 42 N.R., Morton St., New York. For San Juan, Ponce, Mayaguez, Aguadilla, Humacao and Fajardo, about three times a month. Other ports as freight offers.

Santo Domingo (Dominican Republic).

Average time New York to San Domingo City, 9 days.

1. Clyde Steamship Co. (Santo Domingo Line), 11 Broadway, N.Y. American steamers—Sailings: From Pier 34, Atlantic Basin, Brooklyn. For Puerto Plata, Samana, Sanchez, La Romana, Macoris (San Pedro de Macoris), and Santos Domingo City, every 10 days; Montecristi and Azua, every 20 days.

2. Donald Steamship Co., Inc., 18 Broadway, N.Y. British steamers—Sailings: From Pier 8 E.R., New York. For all principal ports in Santo Domingo, every two weeks.

Windward Islands.

Average time New York to Barbadoes, 9 days; average time New York to Trinidad, 8 to 9 days.

1. Quebec Steamship Co. (A. E. Outerbridge, 29 Broadway, N.Y.). British steamers—Sailings: From Pier 47 N.R., W. 10th St., N.Y., occasionally loading in Brooklyn during April and May. For Martinique, St. Lucia and Barbadoes, every alternate Saturday, with occasional intermediate sailings; St. Martin's and St. Vincent direct, at irregular intervals or by transhipment at St. Kitts or Barbadoes.

2. New York & Demerara Steamship Co (L. W. & P. Armstrong, 106 Wall St., New York). Chartered steamers—Sailings: For Martinique and Barbadoes, about every five weeks.

3. Trinidad Line (Trinidad Shipping & Trading Co., Limited, 29 Broadway, New York). British steamers—Sailings: From Pier 24, Robinson Stores, Brooklyn. For St. George's (Grenada) and Port of Spain and San Fernando (Trinidad), about every 10 to 14 days. Through Bills of Lading are issued via Port of Spain for Tobago (Scarborough).

4. Royal Mail Steam Packet Co. (Sanderson & Son, 22 State St., N.Y.). British steamers—Sailings: From Pier 42 N.R., Morton St., N.Y. For Trinidad and Barbadoes, every alternate Saturday, connecting at Trinidad with company's steamers for Grenada, St. Vincent, St. Lucia, Dominica, Montserrat, Antiqua, Nevis and St. Kitts.

5. Royal Dutch West India Mail Line, 17 State St., New York. Dutch steamers—Sailings: From Pier 3, Bush Terminal, 47th St., Brooklyn. For Barbadoes, every alternate Monday; Trinidad, every fourth Monday.

There are also sailings from Canadian ports to Cuba, Leeward Islands, Windward Islands, Bahama Islands; also for ports in Argentine by transhipment.

Any other information in regard to shipping regulations, minimum Bills of Lading, etc., may be secured through the Transportation Department, Toronto, or by writing direct to the steamship company at New York over whose line you intend shipping.

NEW WESTERN FREIGHT RATES ORDERED BY THE DOMINION RAILWAY BOARD

Comparison of the "Present" Rates with the "New" Rates Taking Effect September 1, 1914

(Compiled by the Transportation Department.)

NOTE.—"P"—Present rates. "N"—New rates, effective September 1st. "R"—Reduction in cents per hundred pounds.

FROM MONTREAL, TORONTO AND POINTS TAKING SAME RATES.

	Classes								
To	1	2	3	4	5	6	7	8	10
Winnipeg, Man., and Gretna, Man.									
P	161	136	109	83	69	64	50	49	45
N	160	135	108	83	69	62	49	49	44
R	1	1	1	..	..	2	1	..	1
Portage La Prairie, Man.									
P	174	146	117	90	75	66	52	51	47
N	171	144	116	89	74	66	51	51	46
R	3	2	1	1	1	..	1	..	1
Brandon, Man.									
P	186	157	126	97	81	72	56	54	50
N	185	156	125	96	81	72	55	54	50
R	1	1	1	1	..	..	1	..	..
Minnedosa, Man.									
P	186	157	126	97	81	72	56	55	50
N	185	156	125	96	81	72	55	55	50
R	1	1	1	1	..	..	1	..	..
Regina, Sask.									
P	229	193	154	118	99	89	66	62	59
N	221	186	150	114	96	86	64	62	58
R	8	7	4	4	3	3	2	..	1

	Classes								
To	1	2	3	4	5	6	7	8	10
Weyburn, Sask.									
P	223	188	151	115	98	87	64	64	58
N	217	183	146	112	94	84	62	62	57
R	6	5	5	3	4	3	2	2	1
Lanigan, Sask.									
P	238	200	160	122	104	92	68	64	61
N	228	192	154	118	100	90	66	64	60
R	10	8	6	4	4	2	2	..	1
Moose Jaw, Sask.									
P	234	196	158	120	102	91	67	66	61
N	228	192	154	118	100	90	66	64	60
R	6	4	4	2	2	1	1	2	1
Assiniboia, Sask.									
P	241	202	163	124	106	95	69	68	63
N	232	195	157	120	102	91	67	65	61
R	9	7	6	4	4	4	2	3	2
Saskatoon, Sask.									
P	250	210	168	128	109	98	72	67	65
N	239	201	162	123	105	94	69	66	62
R	11	9	6	5	4	4	3	1	3

Rates in cents per 100 pounds.

To	Classes 1	2	3	4	5	6	7	8	10
Medicine Hat, Alta.									
P	275	231	186	141	121	101	79	76	71
N	263	220	177	135	115	104	77	71	68
R	12	11	9	6	6	4	2	5	3
Swift Current, Sask.									
P	253	213	171	131	111	99	73	72	66
N	242	203	163	125	107	95	70	67	63
R	11	10	8	6	4	4	3	5	3
Macklin, Sask.									
P	272	228	183	139	120	107	78	76	70
N	263	220	177	135	115	104	77	71	68
R	9	8	6	4	5	3	1	5	2
Lethbridge, Alta.									
P	290	243	194	148	127	115	84	80	74
N	276	231	185	141	121	109	81	73	71
R	14	12	9	7	6	6	3	7	3
Calgary and Edmonton, Alta.									
P	299	250	201	153	133	120	88	84	77
N	288	242	194	147	126	115	85	76	74
R	11	8	7	6	7	5	3	8	3
Cranbrook, B.C.									
P	350	293	236	179	157	140	103	92	90
N	305	255	205	156	135	124	91	80	80
R	45	38	31	23	22	16	12	12	10
Revelstoke, B.C.									
P	378	317	254	193	171	155	114	101	98
N	326	273	219	167	146	134	99	86	86
R	52	44	35	26	25	21	15	15	12
Nelson, B.C.									
P	378	317	254	193	171	155	114	101	98
N	326	273	219	167	146	134	99	86	86
R	52	44	35	26	25	21	15	15	12
Phoenix, B.C.									
P	416	350	283	217	190	172	129	116	109
N	364	306	248	191	165	151	114	99	97
R	52	44	35	26	25	21	15	17	12
Spence's Bridge.									
P	408	341	272	205	183	169	127	108	108
N	344	285	226	175	152	139	105	92	92
R	64	56	46	30	31	30	22	16	16
Kamloops, B.C.									
P	398	333	266	201	179	164	121	106	103
N	338	281	224	172	150	137	103	90	90
R	60	52	42	29	29	27	18	16	13

From Fort William, Port Arthur and West Fort.

Winnipeg, Man.									
P	86	72	57	42	38	34	25	24	20
N	85	71	56	42	38	32	24	..	19
R	1	1	1	..	..	2	1	..	1
Portage la Prairie, Man.									
P	99	82	65	49	44	36	27	26	22
N	96	80	64	48	43	36	26	..	21
R	3	2	1	1	1	..	1	..	1
Brandon, Man.									
P	111	93	74	56	50	42	31	29	25
N	110	92	73	55	50	42	30	..	25
R	1	1	1	1	..	..	1	..	..
Gretna, Man.									
P	86	72	57	42	38	34	25	24	20
N	85	71	56	42	38	32	24	..	19
R	1	1	1	..	..	2	1	..	1
Minnedosa.									
P	111	93	74	56	50	42	31	30	25
N	110	92	73	55	50	42	30	..	25
R	1	1	1	1	..	..	1	..	..
Regina, Sask.									
P	154	129	102	77	68	59	41	37	34
N	146	122	98	73	65	56	39	..	33
R	8	7	4	4	3	3	2	..	1
Weyburn, Sask.									
P	148	124	99	74	67	57	39	39	33
N	142	119	94	71	63	54	37	..	32
R	6	5	5	3	4	3	2	..	1

To	Classes 1	2	3	4	5	6	7	8	10
Lanigan, Sask.									
P	163	136	108	81	73	63	43	39	37
N	153	128	102	77	69	60	41	..	35
R	10	8	6	4	4	3	2	..	2
Moose Jaw, Sask.									
P	159	136	106	79	71	61	42	41	36
N	153	128	102	77	69	60	41	..	35
R	6	8	4	2	2	1	1	..	1
Assiniboia, Sask.									
P	166	139	111	83	75	65	44	43	38
N	157	131	105	79	71	61	42	..	36
R	9	8	6	4	4	4	2	..	2
Saskatoon, Sask.									
P	175	146	116	87	78	68	47	42	40
N	164	137	110	82	74	64	44	..	37
R	11	9	6	5	4	4	3	..	3
Swift Current, Sask.									
P	178	149	119	90	80	69	48	47	41
N	167	139	111	84	76	65	45	..	38
R	11	10	8	6	4	4	3	..	3
Medicine Hat, Alta.									
P	200	167	134	100	90	78	54	51	46
N	188	156	125	94	84	74	52	..	43
R	12	11	9	6	6	4	2	..	3
Macklin, Sask.									
P	197	164	131	98	89	77	53	51	45
N	188	156	125	94	84	74	52	..	43
R	9	8	6	4	5	3	1	..	2
Lethbridge, Alta.									
P	215	179	142	107	96	85	59	55	49
N	201	167	133	100	90	79	56	..	46
R	14	12	9	7	6	6	3	..	3
Calgary and Edmonton, Alta.									
P	224	186	149	112	102	90	63	59	52
N	213	178	142	106	95	85	60	..	49
R	11	8	7	6	7	5	3	..	3
Cranbrook, B.C.									
P	275	229	184	138	126	110	78	67	65
N	230	191	153	115	104	94	66	..	55
R	45	38	31	23	22	16	12	..	10
Revelstoke and Nelson, B.C.									
P	303	253	202	152	140	125	89	76	73
N	251	209	167	126	115	104	74	..	61
R	52	44	35	26	25	21	15	..	12
Phoenix, B.C.									
P	341	286	231	176	159	142	104	91	84
N	289	242	196	150	134	121	89	..	72
R	52	44	35	26	25	21	15	..	12
Spence's Bridge, B. C.									
P	333	277	220	164	152	139	102	83	83
N	269	221	174	134	121	109	80	..	69
R	64	56	46	30	31	30	22	..	16
Kamloops, B.C.									
P	323	269	214	160	148	134	96	81	78
N	263	217	172	131	119	107	78	..	65
R	60	52	42	29	29	27	18	..	13

From Winnipeg, Man.

Regina, Sask.									
P	90	75	60	45	40	33	25	22	20
N	84	70	55	42	37	31	23	..	19
R	6	5	5	3	3	2	2	..	1
Moose Jaw, Sask.									
P	96	80	64	48	43	36	27	25	21
N	89	75	60	45	40	34	25	..	20
R	7	5	4	3	3	2	2	..	1
Medicine Hat, Alta.									
P	137	114	91	69	62	52	37	37	30
N	126	105	84	63	57	48	33	..	28
R	11	9	7	6	5	4	4	..	2
Calgary and Edmonton, Alta.									
P	158	132	105	79	71	60	42	41	35
N	146	122	98	73	65	56	39	..	33
R	12	10	7	6	6	4	3	..	2
Saskatoon, Sask.									
P	111	93	74	56	50	42	31	27	25
N	101	84	68	51	46	38	27	..	23
R	10	9	6	5	4	4	4	..	2

To	Classes 1	2	3	4	5	6	7	8	10
Lethbridge, Alta.									
P	148	124	99	74	67	57	39	39	33
N	138	115	92	69	62	53	37	..	31
R	10	9	7	5	5	4	2	..	2
From Regina, Sask.									
Aikins, Sask.									
P	54	45	36	27	25	21	16	15	14
N	51	43	34	26	23	19	14	..	13
R	3	2	3	1	2	2	2	..	1
Medicine Hat, Alta.									
P	80	67	54	40	36	30	22	21	18
N	73	61	48	37	32	27	20	..	17
R	7	6	6	3	4	3	2	..	1
Bassano, Alta.									
P	96	80	64	48	43	36	27	25	21
N	89	75	60	45	40	34	25	..	20
R	7	5	4	3	3	2	2	..	1
From Saskatoon, Sask.									
North Battleford, Alta.									
P	43	36	29	22	20	18	14	12	11
N	40	33	26	20	19	16	13	..	10
R	3	3	3	2	1	2	1	..	1
Watrous, Sask.									
P	33	28	22	17	16	13	11	11	8
N	28	24	19	14	14	11	..	..	7
R	5	4	3	3	2	2	..	..	1
Wainwright, Alta.									
P	65	58	46	35	31	25	19	17	16
N	57	51	41	31	27	22	..	..	14
R	8	7	5	4	4	3	..	..	2
From Calgary, Alta.									
Swift Current, Sask.									
P	83	69	55	41	37	31	23	23	19
N	80	66	54	40	36	30	22	..	18
R	3	3	1	1	1	1	1	..	1
Medicine Hat, Alta.									
P	60	50	40	30	27	22	17	16	15
N	56	47	37	28	26	20	16	..	14
R	4	3	3	2	1	2	1	..	1
Revelstoke, B.C.									
P	94	78	63	47	42	35	26	27	21
N	93	77	62	47	42	35	26	..	21
R	1	1	1	..	..	..	..	..	..
Fernie, B.C.									
P	74	62	49	37	33	27	21	22	17
N	66	55	44	33	30	25	19	..	15
R	8	7	5	4	3	2	2	..	1
Nelson, B.C.									
P	120	105	90	75	60	..	..	..	..
N	116	97	77	59	53	45	31	..	26
R	4	8	13	16	7	..	..	..	..
From Nelson, B.C.									
Sandon, B.C.									
P	48	39	32	23	22	19	..	..	12
N	45	37	30	22	20	17	14	..	11
R	3	2	2	1	2	2	..	..	1
Cranbrook, B.C.									
P	66	55	44	33	30	24	..	..	16
N	63	53	42	31	28	23	18	..	14
R	3	2	2	2	2	1	..	..	2
Waldo, B.C.									
P	92	77	62	46	41	35	..	..	21
N	75	63	50	37	33	28	20	..	17
R	17	14	12	9	8	7	..	..	4

BRITISH FOREIGN TRADE.

The total results of the foreign trade of the United Kingdom for the first half of 1914 were as follows:—

Imports, six months, 1914	$1,829,236,030
Decrease on six months, 1913 ..	13,931,378
Exports, six months, 1914	1,243,184,464
Decrease on six months, 1913..	7,777,625
Re-exports, six months, 1914	288,468,678
Increase on six months, 1913..	1,074,713

THE MORATORIUM.

The Instrument Which Suspends Business.

Perhaps the most immediate and striking effect of the present war has been its complete derangement of stock and money markets the world over. For those nations participating in the struggle, the problem of establishing stability in domestic transactions of a commercial character and at the same time financing the conduct of a colossal war on an unprecedented scale, would appear to be impossible and unsurmountable. It has, however, been solved by what is legally known as the proclamation of a moratorium. In Germany, France and England in turn the respective Governments have seized upon this expedient to prevent financial chaos. A moratorium has been defined as "a period during which an obligor has a legal right to delay meeting an obligation, especially such a period granted in an emergency as to a bank or debtors generally, by moratory law."

A government moratorium, then, authorizes the temporary suspension of bills of exchange and payments in pursuance of obligations. It is to be noted that it is only a palliative and neither extinguishes the debts and obligations nor the interest payable thereon. In England, where business was entirely dislocated and almost paralyzed by reason of the unusual circumstances in Europe, the larger commercial houses were unable to meet their obligations, foreign remittances being cut off and home financiers being unwilling to make any advances. In such an emergency a stay to proceedings, unless the entire business of the country was to be thrown into bankruptcy, was imperative. A bill entitled "The Postponement of Payments Bill" was accordingly passed in England, empowering His Majesty by proclamation to authorize "the postponement of any bill of exchange or negotiable instrument, or any other payment in pursuance of any contract to such extent, for such time, and subject to such conditions as may be specified in the proclamation." The proclamation may be invoked at any time through a period of six months and is revokable at the will of His Majesty. A thirty days' moratorium has already been proclaimed.

In Canada Parliament has clothed the Governor-General with a similar power of proclaiming moratorium. It is not likely to be invoked in this country, however, as a counterpart of the English emergency does not obtain here, Canadian houses having for the past year been liquidating their liabilities and running their business as far as possible on a safe margin.

MASSEY-HARRIS WORKS CLOSE.

By the closing down of the Massey-Harris Company plants at Toronto, Brantford and Batavia, N.Y., a great number of men are thrown out of employment. A notice was posted on the blackboard of the Toronto factory informing the employees there that the works will be closed down on August 22nd for the usual summer stock-taking, but, owing to present unsettled conditions, it is impossible to say when business will be resumed. Operations are also being suspended in Batavia, N.Y., and Brantford. The company have issued a statement explaining that their action was a necessary result of the war.

CANADA CARBIDE CO., LTD., BUSY.

The business of the Canada Carbide Company (a subsidiary of the Shawinigan Water and Power Co.) has been greatly stimulated in the past few weeks through the tie-up of Germany's export trade. Large orders have been received.

Rich Prizes of War for Canadian Manufacturers

1. Canadian Imports from Germany.. $14,473,833 } We should substitute Canadian made goods
   Canadian Imports from Austria.... 1,674,349 } for these.
2. German Exports to World ..... $2,165,688,000 } But such prizes are small compared with
   Austrian Exports to World..... 585,700,000 } these. Why not go after them?
3. Beyond all this, Canadians import $686,604,413 worth of goods annually from the world (including, for instance, $449,950,043 worth from the United States.) Why not, in the present emergency, get the Canadian people to buy much of this at home, so as to lessen unemployment? Cannot quality and price be made right?

Note:—Statistics in 1 and 3 for year ending March 31st 1913; in 2 for year 1912.

CONCERTED EFFORT FOR TRADE EXPANSION.

The Financial Times, of Montreal, calls for co-operation of the Finance, Trade and Agricultural Departments in order to keep Canadian factories busy and to transfer unemployed to the land. The *Times* says:

"A strong committee of leading manufacturers and bankers should be formed under the auspices of the Finance, Trade and Agricultural Departments, and an immediate selling campaign devised for aggressive salesmanship abroad. The existing trade commissioners' offices in foreign and United Kingdom towns could be used as a nucleus for the presentation of our goods, and a large body of experienced commercial travellers could be engaged to invade those countries which are in a position to buy our product.

Educational Work.

"Such a representative committee of manufacturers could also do a great work of an educational character towards a 'back to the land' campaign. Take the Province of Quebec, for instance, with its wonderful fertile lands, which could be broken to seed, and by the next harvest time the agricultural production would be greatly increased and thus become a matter of immediate wealth to the whole of Canada and at the same time enable the mother country to keep its millions of fighters and workers from comparative destitution.

"We now realize, and with a grim determination, that every man in Canada must fight or work. The shirker and the man who habitually lives on his wits will be compelled to roll up his sleeves, and the most natural relief would be on the farm, under skilled agriculturists, of whom there surely must be plenty for purely technical and overseeing duties."

NO INSURANCE ON EMPTY HOUSE.

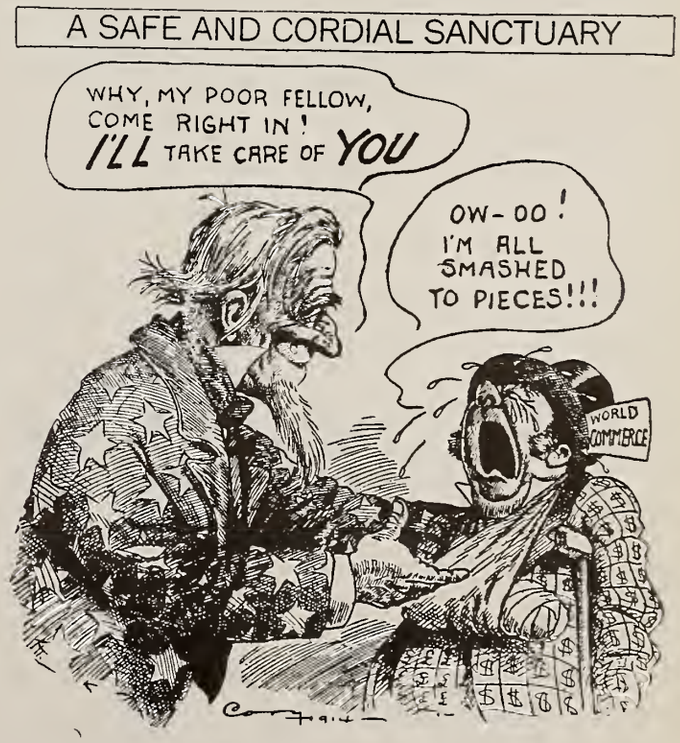
A judgment of great interest to every house owner was recently confirmed by the Court of King's Bench. The plaintiff owned a house at Longueuil and insured it for $1,000, it being stated that the policy covered the house "occupied as a residence." As a matter of fact, for some months previous to the fire, the house was unoccupied and the insurance company maintained that this utterly changed the nature of the risk. The plaintiff's counsel contended that the words, "occupied as a residence" were merely meant to designate the character of the building to distinguish it from a mercantile risk. The Chief Justice declared that, in the unanimous opinion of the Court, an essential fact regarding the character of the risk had not been communicated to the insurers. This was sufficient to void the policy. In view of this judgment it is highly important that holders of insurance policies covering private residences should notify the company when the building insured becomes unoccupied for a period of more than thirty days.

PRESIDENT HENDERSON'S STATEMENT.

"I know that every manufacturer throughout the Dominion will do everything possible to keep as many of his employees working during the present crisis. Our members are going to do this even if it means a sacrifice on their part. It is the duty of manufacturers to their country. In many cases it may not be possible to keep men employed on full time all along, but married men will be given the most consideration. The best way the general public can assist the manufacturers to keep their men employed is to buy Canadian-made goods as much as possible."—Mr. E. G. Henderson, President of the Canadian Manufacturers Association, to the press.

LEAD FOR THE NAVY.

The Department of Naval Service called for tenders for 30,000 pounds of pure white lead, to be delivered at Halifax, and 10,000 pounds to be delivered in Esquimalt, B.C. Brandram-Henderson, Limited, contributed the necessary white lead "as a gift to this country and the Empire at this time of need."



Uncle Sam promises to be very good to him

MAKING SHOES FOR OUR SOLDIERS.

On Monday, August 17th, Mr. Ames, Vice-President of the Ames-Holden, McCready Co., Ltd., spoke as follows to a gathering made up of all the men and women employed in No. 1 factory of this Company:

"For sixty years the name which I bear has been connected with the Company, and that is why I am naturally concerned in maintaining its honor and reputation.

"Without my knowledge or assistance, this Company has obtained a contract from the Government for 40,000 pairs of boots, to be used by the soldiers going to the front. I am informed by the Managing-Director that a very low bid was put in for these goods, primarily for the purpose of keeping you men and women employed during these trying times.

"Now I want to say a word to you about the boot contract. These boots are to be worn by the Canadian soldiers who go to war. A soldier's usefulness depends largely upon his ability to march. He cannot travel unless his feet are sound, and his feet can only be kept in good condition if his boots are right. The management will purchase the best material possible to fill this contract. The Superintendents will use the utmost vigilance, but unless every one of you make it a personal matter, some of these boots may not be quite right.

'It is easy for a laster to leave a nail in the sole, which may lame a man who wears the boot. The man who cut the soles might put in some weak shanks, in which case the soldiers wearing those boots could not use a spade properly; and it might happen that on their being able to dig entrenchments their very lives would depend. When you are putting in the counters, remember that a bad counter means a down-trodden heel and a blistered foot. When you are nailing on the heels remember that to drive the nails one-sixteenth of an inch short might mean that the heels would come off and the wearer be handicapped in marching. You women of the stitching room remember that if the linings are not put in properly or any bunching occurs, it may result in a blister where the foot is chafed.'

"Now, I want every one of you to remember that these boots are to be worn by our Canadian boys, and that a bad boot may mean a lame soldier, and a lame soldier may mean a Canadian taken prisoner or shot.

"People are giving large sums of money to help those who go to the war. You can help by seeing that they are properly shod.

"The honor of the firm, and the lives of our brave men, I leave in your hands with perfect confidence."

ARTICLES IMPORTED BUT NOT MADE IN CANADA.

The following is a partial list of articles imported into Canada which are not made in the Dominion, supplied to INDUSTRIAL CANADA by the Trade and Commerce Department:

Acid Salicylic, Agasote Mill Board, Air Rifles, Asbestos Pipe Coverings, Carbons (Electric Light), Carpenter's Tool Bags of Grass, Copper Tubing (seamless), Galvanized Wire Netting 14 x 15 gauge, Galvanized Wire Netting any gauge (¾ in. mesh and smaller), Grass Carpet, Lead Pencils(wood), Miniature Electric Incandescent Lamps, Moving Picture Machines, Pipe Coverings of Cork for cold storage insulation, Rolled Edges Steel Plates, Safety fuses (not metallic), Salicylate of Soda, Seamless Steel Boiler Tubes, Oil Engines, Sewing Machine (straw hat), Sheet Copper and Seamless Copper Tubing, Sheets (bessemer), Slag Trucks, Sockets (incandescent for street lamps 1½ in. inside diameter and over), Steam Steering Engines for equipment of ships, Steel Squares, Store Fronts (copper holders designed for holding plate glass in store fronts), Strychnine (Alkaloid and Sulphate of), Telephone Carbon Protector Blocks (carbon discs and glass lenses used in manufacture of telephones), Tubing (seamless steel), Unloaded Dry Shells, Wads (gun).

NEW ADVERTISING SERVICE.

A new advertising service has been inaugurated by Richard G. Langrill, with offices in the Dineen Building, Toronto. Mr. Langrill has had an extended experience in the advertising field. His work has been especially along the line of technical advertising, in which line he has been conspicuously successful.

Mr. Langrill will devote his attention almost exclusively to the advertising campaigns of manufacturers. The trade and technical press will welcome his assistance in advancing the standard of this class of advertising.

BOOK ON EXPRESS SERVICE AND RATES.

W. H. Chandler, Assistant Manager Traffic Bureau the Merchants' Association of New York, in his treatise on "The Express Service and Rates," presents a work of timely and lively public interest. The vast field of express service has, strange to say, never been adequately treated. Stimson's "Express History" treats of the historical side, but it is now out of date. Various works on transportation devote short chapters to express service, but there has never been an adequate treatment. This fact, even if there were no other reasons for interest in Mr. Chandler's treatise, just published by the LaSalle Extension University, Chicago, should make this carefully-prepared manual noteworthy.

TIMELY ADVICE.

(From a Great British Economist.)

Sir George Paish, until recently editor of the *Statist*, but who resigned to place his services at the disposal of the British Government, says:

"Orders should be given, factories should be run, and everything should be arranged to maintain, as far as possible, the productive power and the income of the country.

"At such a time it is of the greatest importance that every one should endeavor to act as if great events were not impending. Were confidence seriously disturbed, business would come practically to an end, and our ability to face the difficulties that may be in front of us would be seriously impaired.

"Therefore, it is of vital importance that, as far as possible, the events that are now taking place should not interfere with the daily life and the daily work of the nation.

"It cannot be too clearly realized that the nation's income is dependent upon its daily work and its daily production, and that at a time such as the present it is desirable that every one should work harder and be more productive, in order that we may have the income, and therefore the money, with which to meet any expenditure and any burden that may be placed upon us."

The United Mine Workers of America are paying out strike benefits amounting to $16,500 per week to the striking miners of Vancouver Island. Up to date the strike has cost the international organization a million and a quarter dollars.

CHANGES OF INTEREST TO MANUFACTURERS PROPOSED IN BAGGAGE REGULATIONS

The Board of Railway Commissioners has asked the Association to file any objections there may be to a revised set of rules and regulations the railways have submitted for approval. The application will be considered at a sitting of the Board at Ottawa, September 15th.

Attention is directed to the following as being of special interest to manufacturers. Any objection to or criticism thereof should be sent to the Manager of the Transportation Department without delay:—

Personal Baggage.

On and after June 1, 1914, only such trunks and cases constructed in the form of a trunk, or other rigid containers, as are square or rectangular (all angles being right angles), will be accepted for transportation in regular baggage service, provided that any such trunk or case or other riid container may have one gable or bulging end, or not more than two bulging sides, each opposite the other.

Excess Value.

(*a*) The carriers issuing and concurring in these regulations will not accept for transportation from any one passenger baggage or other property that is declared to exceed $2,500 in value.

(*b*) The carriers issuing and concurring in these regulations shall not be liable in respect of or consequent upon loss of or damage or delay to any personal baggage *whether caused by or resulting from negligence of the carrier, its servants or agents or otherwise howsoever for any amount in excess of $100* for any such baggage belonging to and checked for an adult passenger, and $50 for any such baggage belonging to or checked for a child travelling on a half-fare ticket, which amounts shall be deemed to be the respective values of such baggage whether charged for as excess size or excess weight baggage or carried as free allowance, unless greater values are declared and extra charges paid at time of checking in accordance with the carrier's current tariff.

(*c*) Charges for declared excess valuation must be prepaid.

Personal Baggage Allowance.

Subject to limitations as shown in Rules 19 and 20, one hundred and fifty (150) pounds of baggage, not exceeding one hundred dollars ($100.00) in value, will be checked without charge for each adult passenger, and seventy-five (75) pounds, not exceeding fifty dollars ($50.00) in value, for each child travelling on a half ticket.

Commercial Travellers' Baggage Allowance and Liability.

Rule 18—(*a*) Subject to limitations as shown in Rules 19 and 20, three hundred (300) pounds of sample and personal baggage will be checked free between points in Canada only, and then only on presentation of current year's Canadian commercial travellers' transportation privilege certificates (on which baggage privileges must be endorsed) together with commercial tavellers' passage ticket which must bear corresponding number. Unless otherwise specifically authorized by tariff no special allowance beyond one hundred and fifty (150) pounds per ticket will be made commercial travellers presenting excursion, summer tourist, convention or second-class tickets issued to the public, even though commercial travellers' certificate is presented with such ticket. *A free allowance of not more than one hundred and fifty (150) pounds of sample and personal baggage will be granted any commercial traveller who is not a member of a recognized Canadian Commercial Travellers' Association.* Baggage must be checked only to destination (except where stop-over is allowed, or as per clause (*b*) of this rule), and via same route as passage ticket and must be weighed each time checked. Only one ticket will be honored in checking any one lot of sample baggage except that when a commercial traveller is accompanied by an assistant who is solely in his employ, or that of the firm he represents, the authorized free allowance may be granted on each ticket.

(*b*) Commercial travellers presenting week-end tickets may have usual allowance of three hundred (*300*) *pounds of sample baggage, and personal baggage checked free* on going or return journey, either to destination of ticket, or to an intermediate point, provided such point is on direct route of ticket.

(*c*) In consideration of special concessions granted to commercial travellers, the carriers issuing and concurring in these regulations will not be liable for any claim whatsoever in respect of or consequent upon any loss or damage or delay to any sample baggage or personal baggage transported for a commercial traveller as such whether the same is charged for as excess baggage or carried as free allowance and whether such loss, damage or delay is caused by or results from negligence of the carrier, its servants or agents, or otherwise, howsoever.

In all cases it is stated that carriers issuing and concurring in these proposed regulations shall not be liable in respect of or consequent upon loss of or damage or delay whether caused by or resulting from negligence of the carrier, its servants or agents or otherwise howsoever for any amount in excess of $100.00 for personal baggage; $5.00 for such articles as baby carriages, bicycles, toboggans and skis, racing shells and racing canoes for regattas, and canoes.

It will also be observed in subsection (*c*) of proposed Rule 18, that no liability is assumed whatsoever, in respect of or consequent upon any loss of or damage or delay to any sample baggage, or personal baggage transported for a commercial traveller, etc., etc.

Rule 19 limits weight of a single piece of baggage to 250 pounds.

Rule 20 limits the dimension of a single piece of baggage to 45 inches, and fixes the charge for each inch in excess of that measurement equal to the charge of 5 pounds of excess weight

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MACMILLAN COMPANY URGES EMPLOYEES TO BUY IN CANADA.

The Macmillan Company of Canada, Limited, has issued a circular to retailers urging the purchase in the British Empire of articles for their Christmas trade, such as dolls, paint boxes, cards, and valentines, formerly bought from Germany. As the company does not make these articles its action is disinterested. A notice has also been sent to the Macmillan employees from which the following is an excerpt:

"In making your purchases you should always insist on having Empire-made goods."

Other firms will do well to follow this example.

ENGLISH VIEW OF OUR PROSPECTS.

(From *Canada*, London, Eng.)

The majority of people in the mother country who have invested in Canadian enterprises perhaps regard the European conflagration as certain to depress still further financial conditions in the Dominion. This fear is not well founded, for, as an Anglo-Canadian financial authority observed to us, some branches of Canadian trade must be stimulated by the war. The farmers may get double the price for their wheat as compared with last year. This means to them two harvests in one, and more profit than if they had grown two crops. This will tend towards "easy money" in Canada. Many Canadian manufacturing concerns will enjoy a greatly extended market owing to the closing of so many European factories. The milling companies, the canning companies, pork packers, and others will get increased prices for all they have to sell. Even the textile manufacturers will benefit. Manufacturers of boots and shoes and other articles of general use will find an enlarged market. There is little reason to fear the risk of seizure on the Atlantic. The fleets of the Mother Land will protect the trade routes. We consider that the new outlook before many Canadian manufacturers is by no means discouraging.

IMPETUS TO LUMBERING.

It is generally expected that, as a consequence of the war, logging operations in the Canadian woods will be carried on more actively this year than for many years past, and probably through the winter. The operations will take place mostly in connection with the cutting of spruce wood, which is required to make up the depleted spruce reserve occasioned by the exceptional demand for newsprint, and consequently for pulp and pulpwood.

HOW UNITED STATES MANUFACTURERS ATTACK SOUTH AMERICAN MARKETS.

The following directions are given by a prominent United States exporter to United States manufacturers to sell their goods in South American markets in a recent issue of the New York *Journal of Commerce*:

"First. The manufacturer must decide for himself whether or not his goods are likely to be saleable, and in doing this he must consider the topographical and climatic conditions of the country and the chief activities of its inhabitants.

"Second. If he decides that his goods are saleable, he should despatch a complete line of samples, either with his own representative, who is prepared to stay in the country for a considerable length of time, or else to some responsible American firm doing business in South America, and having the proper facilities for exploiting his line, and in the latter instance should be prepared to give this firm his fullest co-operation.

"Third. He should place on consignment with such a firm a sufficient stock of goods to thoroughly supply the immediate demands resulting from this preliminary selling campaign, and to take care of his market until such time as goods ordered from the States can reach his customers.

"Fourth. He should make such prices at these critical times as to convince the purchaser of his intention to do everything he can to secure a permanent foothold in that territory.

"Fifth. He should be prepared to give reasonable credits, based on either the knowledge of the firm representing him, or as the result of direct negotiation with the purchaser himself. There is no need for the American manufacturer to make any sacrifices, nor, as a matter of fact, any concession other than those based on a disposition to depart from his present methods, and to adopt credit systems which are at present in force in South America, and which have always been satisfactory to others.

"Finally and this is most important, it is futile to send any one in quest of this trade unless he knows the language, and unless he is acquainted with the manners, disposition and personality of the people with whom he expects to deal. A thorough conversational knowledge of Spanish (and in Brazil Portuguese) is absolutely essential to the conduct of this business in South America, and this is a fact which should never be lost sight of."

DEATH OF PROFESSOR GALBRAITH.

We regret to record the death of Professor John Galbraith, Dean of the Faculty of Practical Science of the University of Toronto, at his summer home in the Georgian Bay last month. The Dean was highly esteemed by manufacturers, among whom he had many friends. Of a quiet, unobtrusive disposition, Professor Galbraith was extremely popular—his equanimity of temper, his self-disinterestedness, and his devotion to the upbuilding of the School of Practical Science appealing not only to the student body, but to that larger business community with which he was frequently brought in contact through the widespread demand for his practical advice and assistance. As a teacher he was a pioneer in the realm of practical science, as an engineer he has probably done more for Canada than any other Canadian. Although departed, his work will live after him through his student graduates, who number up into the thousands.

DEATH OF H. W. ANTHES.

H. W. Anthes, Managing Director and Secretary-Treasurer of the Anthes Foundry, Limited, of Toronto and Winnipeg, died suddenly of acute indigestion on August 17th.

Deceased was born in Wilmot Township, Waterloo County, in the year 1851. Both his parents were natives of the Province of Alsace-Lorraine, which is now figuring so prominently in the present war. His mother came from the city of Muhlhausen, the scene of the recent conflict between French and German troops. His father was born in Oberseebach.

As a young man the late Mr. Anthes located in Toronto and learned the hardware business with Rice Lewis & Sons, and in the late seventies was manager of the hardware establishment of John Foster & Sons.

In 1889, with E. W. B. Snider of St. Jacob's, he established the Toronto Foundry Company, Limited, the name subsequently being changed to Anthes Foundry, Limited.

DEMAND FOR TEXTILES.

The Dominion Textile Company, Montreal, is to-day employing 7,000 hands in all its mills. There will be no further need to take on employees, but those now at work will be kept fully employed throughout the winter, under the present conditions. All plants are operating.

Mr. F. G. Daniels, general manager of the Dominion Textile Company states that the company had received heavy contracts from the Federal Government for army uniform cloth. These contracts alone are sufficient to keep the company busy for some time. Aside from this, business has been extremely heavy since the war began. Stocks on hand have been absorbed by manufacturers and jobbers.

NEW MANUFACTURING COMPANIES.

The following companies have been recently incorporated in Canada for manufacturing purposes:

Milton, Ont., The Stewarttown Quarries, Ltd.....$	80,000
Kenora, Ont., Kenora Super-Heater Stove Co., Ltd...	50,000
Hamilton, Ont., Best Weather Strip Co., Ltd.	40,000
Windsor, Ont., Windsor Abattoir, Ltd.	40,000
Toronto, Ont., Gas-Accumulator Co. (Can.), Ltd. ...	50,000
Hamilton, Ont., South American Products, Ltd.	40,000
Walkerville, Ont., Canadian Coil Co., Ltd.	40,000
Sudbury, Ont., Arnold & Bell, Ltd.	100,000
Walkerville, Ont., The Robinson Cabinet Mfg. Co., Ltd.	40,000
Parry Sound, Ont., Parry Sound Barrel & Mfg. Co., Ltd	500,000
Toronto, Ont., National Explosives, Ltd.	2,000,000
Montreal, Que., The Dominion Head Rest Co., Ltd..	50,000
Ottawa, Ont., Ottawa Central Mfg. Co., Ltd.	100,000
Montreal, Que., Combusto Devices Corporation of Can., Ltd.	500,000
Dorchester, N.B., Eastern Linen Mills, Ltd.	120,000
Morrisburg, Ont., Caloroxide Corporation, Ltd.	50,000
Edmonton, Alta., The Pioneer Fire Clay Co., Ltd...	250,000
Regina, Sask., International Light & Mfg. Co. of Can., Ltd.	150,000
Estevan, Sask., The Estevan Clay & Pottery Co., Ltd	200,000
Tryon, P.E.I., The Reid Rayner Knitting Mills, Ltd..	36,000
Vancouver, B.C., Standard Furniture, Limited	500,000
Fort George, B.C., Prince George Brewing & Malting Co., Ltd.	200,000

UNITED STATES HOPES TO SELL CANADA MORE STEEL.

That United States iron and steel manufacturers hope to increase their exports to Canada is indicated in the following extract from *American Metal Market*, one of the leading journals published in New York. The same hope is cherished by other United States manufacturers who export to Canada:

"The European war immediately gave rise to expectations that the iron and steel export trade of the United States would be largely increased. The common concept seems to be that our iron and steel exports are chiefly to South America and overseas destinations. As a matter of fact approximately half our iron and steel exports have been to Canada.

Canada Will Buy.

"Thus, with respect to half our present trade, the idea that it hinges upon a restoration of ocean freight movement is erroneous. It is, indeed, the other way about. Canada will buy more from us, not after ocean transportation is resumed, but before it is resumed. We understand the Canadians have been securing very quick deliveries from England, in the case of sheets, for instance, in about three weeks from the time of receipt of order, which means a total time of three weeks if the order is cabled. Consequently it is to be assumed that Canada has not been carrying heavy stocks and will be in the market very soon. Supplies from England, of course, are entirely shut off as within 24 hours of the declaration of war an embargo was laid upon exportation of all metals.

"However interesting the prospect of increased iron and steel exports by water when ocean movement is restored, the fact of the moment is that such trade as we had is shut off, and this is no unimportant item. Regard is usually had to the tonnage iron and steel exports, these having been 2,948,466 gross tons in 1912, the record calendar year, 2,759,232 tons in 1913, and 701,033 tons in the first five months of this year, or at the rate of 1,700,000 tons a year. Assuming something like one-half of this is to be with Canada, the remainder is still a very large amount of business to lose, even if only temporarily.

Other Manufactures.

"These tonnage exports of iron and steel are by no means all the iron and steel exports we have, however, there being a large export trade in manufactures. In agricultural implements our export trade in the past fiscal year has been about $32,500,000 in value, and considerably less than half of this was to the North American continent. The balance of the business is all shut off.

"In iron and steel manufactures, apart from agricultural nmplements, there is a very large trade. The total value of all iron and steel exports in the fiscal year ended last June, not including agricultural implements,, was (with June estimated) $242,000,000 in value, and by actual count we find that the value of the tonnage lines, already mentioned, constituted precisely 33.4 per cent. of the total value, or only one-third. The remaining two-thirds, in machinery, hardware, cutlery, etc., together with agricultural implements, probably represented about a million tons of iron and steel in the form in which delivered to the manufacturers of these export goods. About half of this business, being outside the North American continent, is shut off.

"The first adjustment, then, is with respect to a decrease in export shipments and not an increase. So far as can be observed there has been no decrease in iron and steel production since the war began, and if no decrease occurs, it will be conclusive evidence of an actual increase in the domestic consumption of iron and steel. If, later, exports are resumed in larger volume than ever the American iron and steel trade should find itself in a very prosperous position."

CANADA'S RESOURCES CAN BE SEEN AT C.N.E. AS NOWHERE ELSE.

Canada's natural resources are so varied in character and so scattered of location that even the most inveterate traveller is hardly able to secure a comprehensive idea of their extent. But the information is furnished to the visitor to the Canadian National Exhibition, Toronto, August 29th to September 14th, in a startlingly suggestive way. The federal and provincial exhibits comprise a series of displays that give at a glance a wonderful insight into the sources of the country's wealth. It is constant delight to the patriotic Canadian and a revelation to the visitor from another land, and should certainly prove one of the greatest of educational features, giving the sightseer a finer idea of the capabilities of the country in a few minutes than he could otherwise acquire in years. In the Government building will be seen a complete range of the edible inhabitants of the oceans and the inland waters, shown by the Dominion Government, while the Provinces display their special resources, such as grain, fruits and ores from Ontario; grains from the West; timber, fruit and minerals from British Columbia, and fish and minerals from the Maritime Provinces. "The combined display can only be termed magnificent," said an American visitor last year.

UNITED STATES WILL SELL.

All of our bountiful crops that can be gathered and that we can spare will be needed to supply the millions of Europe whose farm hands are called from the harvest to the battlefields. The factory industries of Europe may be crippled and it would seem as if exports of textile fabrics to the United States would be checked, giving us our home markets again and the possibility of being called upon to supply, to the best of our ability, the foreign markets which are temporarily cut off from their usual foreign sources.—*Boston World Textile Record.*

FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of July, 1914.

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

Canadian Pacific Railway.

C.R.C.	R.R. No.	Effective.	Description.
Sup. 3 W 1911	Sup. 3 W 3095	Aug. 28-14	Ores and concentrate, stations in B.C. to points in U.S.
Sup. 24 to 30 inclusive W 1915	Sup. 24 25-26-27-28-29-30 W 3101	Various dates	Commodities between C. P. western line stations.
Sup. 13 W 1919	Sup. 13 W 3111	July 15-14	Switching and interswitching at C.P. and E. & N. station.
Sup. 14-15 W 1919	Sup. 14-15 W 3111	July 30-14	Switching and interswitching at C.P. and E. & N. station.
W 1947 Cancels W 1867	W 3201 Cancels W 2993	July 15-14	Iron and steel (structural), Port Arthur and Fort William to Winnipeg, Brandon, Portage La Prairie and Regina.
E 2839 Cancels E 2753 2757 2826	E 2466 Cancels E 2374 2378 2452	Aug. 1-14(R) Sep. 1-14(A)	Class and commodity rates from stations in Eastern Canada to Orient ports via Vancouver. Advance. Reduction.
Sup. 11 W 1789	Sup. 11 W 2828	Various dates	Class and commodity rates between Vancouver, Westminster, etc., and E. & N. stations.
Sup. 31 W 1806	Sup. 31 W 2866	July 30-14	Lumber and shingles, c.l. coast and interior mills to points on C. P., C.N. and G.T.P. Rys.
Sup. 10 W 1842	Sup. 10 W 2952	July 31-14	Ores and concentrates, stations and lake ports in B.C. to smelters in Kootenay District, also to Ladysmith and Vancouver.
Sup. 19 W 1854	Sup. 19 W 2975	Aug. 3-14	Class and commodity rates Port Arthur and Fort William to points west.
Sup. 15 W 1855	Sup. 15 W 2971	Aug. 1-14	Import tariff Japan and China ports to overland Canadian points.
Sup. 12 W 1856	Sup. 12 W 2972	Various dates	Through import tariff Oriental ports to points in Eastern Canada.
Sup. 13 W 1879	Sup. 13 W 3826	July. 17-14	Class and commodity rates Brandon, Portage La Prairie and Winnipeg to B.C. coast points.
Sup. 14 W 1879	Sup. 14 W 3026	July 30-14	Class and commodity rates Brandon, Portage La Prairie and Winnipeg to B.C. coast points.
Sup. 8 W 1873	Sup. 8 W 3013	Various dates	Class and commodity tariff applying between C.P. and C.N. and G.T.P. stations.
Sup. 29 W 1854	Sup. 29 W 2975	Aug. 4-14	Class and commodity rates between Port Arthur, Fort William and stations west.
Sup. 31 W 1915	Sup. 31 W 3101	Various dates	Commodities between C. P. western line stations.
W 1957	W 3216	Apr. 15-15	Special tariff of storage charges at Port Arthur, Fort William and Westfort.
Sup. 1 W 1920	Sup. 1 W 3115	Aug. 6-14	Commodities from C.P. and C.N. stations to points in Eastern Canada.
Sup. 28 W 1715	Sup. 28 W 2640	Aug. 7-14	Class and commodity tariff Vancouver, Westminster and Victoria to stations east.
W 1953 Cancels W 1693 1854 1947	W 3215 Cancels W 2599 2975 3201	Sep. 1-14	Class and commodity rates between Port Arthur, Fort William, Westfort and stations west.
Sup. 32 W 1806	Sup. 32 W 2866	Aug. 17-14	Lumber and shingles from coast and interior mills to points on C.P., C.N. and G.T.P. railways.
E 2838 Cancels E 955 2342 2773 2794	E 2465 Cancels E 545 1942 2395 2418	Aug. 28-14	Commodities between points on C.P.R. and to and from connecting lines. Re-issue. Reduction. Advance.
E 2482 Cancels E 2333	E 2469 Cancels E 1933	Sep. 1-14	Class rates between Eastern Canada and stations west of Port Arthur, Fort William and Westfort. (Reduction.) Lake and rail.
E 2841 Cancels E 2320	E 2483 Cancels E 1920	Sep. 1-14	Class rates between stations in Eastern Canada and points west of Port Arthur, Fort William and Westfort. All rail reduction.
Sup. 72 E 2559	Sup. 72 E 2166	Aug. 4-14	Building material between C.P. stations. Reduction.
Sup. 3 E 2447	Sup. 3 E 2047	Aug. 10-14(R) Sep. 7-14 (A)	Metallic shingles and siding—Galt, Oshawa, Preston and Toronto to C.P. stations and connecting lines. Reduction. Advance.
Sup. 18 E 2646	Sup. 18 E 2262	Aug. 7-14	Switching and interswitching at C.P. stations. Reduction.
Sup. 38 E 2713	Sup. 38 E 2330	Aug. 10-14	Commodities between C. P. stations and to and from connecting lines. Reduction. Advance.
Sup. 38 E 2713	Sup. 38 E 2330	Aug. 10-13	Commodities between points in Eastern Canada. Advance. Reduction.
E 2840 Cancels E 2384	E 2467 Cancels E 1984	Sep. 7-13	Icing charges and instructions governing handling of perishable freight in refrigerator cars.
Sup. 13 E 1714	Sup. 13 E 1301	July 25-14	Canned goods, CL., between C.P. stations. Reissue. Reduction.
Sup. 105 E 2071	Sup. 105 E 1668	July 29-14	Lumber and forest products between stations in Canada. New rates. Reduction.
Sup. 24 E 2529	Sup. 24 E 2133	Aug. 26-14	Commodities, stations in Canada to points in U.S. Reduction.
Sup. 14 E 2643	Sup. 14 E 2259	July 18-14	Pig iron, CL., between C.P. stations. Reduction.
Sup. 15 E 2646	Sup. 15 E 2262	Aug. 21-14	Switching and interswitching at C.P. stations. Advance. Reduction.
Sup. 35 E 2713	Sup. 35 E 2330	July 18-14	Commodities between C. P. stations. Reduction.

That manufacturer is wise who realizes the big economies possible through modern, scientific lighting and gets his plant properly equipped before the short winter days set in. Hydro lighting Engineers advise free of charge.

Modern illumination is the fastest moving science in the World. Illumination knowledge that was modern even a year ago is out of date to-day. And the tendency always is towards greater economy, greater efficiency.

For instance in the days of carbon lamps we were content with about one candle power per three watts of current. Then Tungstens were favorites at 1 to 1¼ c.p. per watt. To-day Hydro Lighting Engineers are not satisfied unless they can deliver you TWO CANDLE POWER for every watt used, and with a new, brilliant, high quality light that was impossible at any cost even a few months ago.

There is a big opportunity to save yourself money on your light if you'll say the word. We are at the other end of your telephone wire.

The Toronto Hydro-Electric System

226 YONGE STREET PHONE ADEL. 2120

C.R.C.	R.R. No.	Effective.	Description.
Sup. 36 E 2713	Sup. 36 E 2330	July 21-14	Commodities between C. P. stations. Reduction.
Sup. 37 E 2713	Sup. 37 E 2330	July 28-14	Commodities between C. P. stations. Reduction.
E 2836	E 2463	July 25-14	Steel rails and fastenings, Sault Ste. Marie to Fort Frances and La Pas. New rates.

Grand Trunk Railway.

Sup. 21 E 2684	Sup. 21 C U 72	Aug. 27-14	Commodities between G. T. stations and from and to connecting lines.
E 2963 Cancels E 2843	C R 172 Cancels C R 153	Sep. 1-14	Elevator storage, etc., at Tiffin, No. 2 elevator.
Sup. 50 E 2855	Sup. 50 C Y 31	Sep. 14-14	Commodities between G. T. stations and to and from. Advance. Reduction.
Sup. 56 E 150	Sup. 56 G B Y 5	July 28-14	Iron commodities between G. T. stations. Reduction.
Sup. 16 E 1080	Sup. 16 C 8	Aug. 31-14	Class rates between stations Dorval and west and Montreal, Valleyfield and east. Advance. Reduction.
Sup. 11 E 1433	Sup. 11 C I 52	Aug. 15-14	Iron commodities Montreal to stations west. Advance. Reduction.
Sup. 8 E 1344	Sup. 8 V 7	Aug. 29-14	Class rates to points in U.S. Reduction.
Sup. 18 E 2457	Sup. 18 S 86	Aug. 24-14	Interswitching at G.T. stations.
Sup. 14 E 2524	Sup. 17 C U 67	Aug. 20-14	Commodities between G. T. stations.
Sup. 26 E 2677	Sup. 26 S 88	July 13-14	Local switching at G.T. stations. Reduction.
Sup. 13 E 2681	Sup. 13 I 140	Aug. 1-14	Import merchandise Montreal harbor to G. T. stations. Reduction.
Sup. 16 E 2783	Sup. 16 C I 146	July 18-14	Pig iron, CL., Hamilton to Woodstock, N.B., $4.90 per gross ton. Reduction.
Sup. 17 E 2783	Sup. 17 C I 146	July 21-14	Pig iron, CL., Hamilton, Midland and Port Colborne, Ont., to Quebec and Point Levis. Reduction.
Sup. 46 E 2855	Sup. 46 C Y 31	Aug. 15-14	Commodities between G. T. stations.
Sup. 47 E 2855	Sup. 47 C Y 31	July 21-14	Iron and steel, Toronto to Cornwall. Reduction.
E 2954 Cancels E 2911	S 102 Cancels S 98	Aug. 28-14	Local switching at G.T. stations.
Sup. 28 E 2303	Sup. 28 R 4	June 20-14	Iron and steel articles, Sydney, N.S., to Port Arthur and Sault. Ste. Marie. Reduction.
Sup. 19 E 2684	Sup. 19 C.U. 72	July 15-14	Commodities between G.T. stations and points in the U.S. Advance. Reduction.
Sup. 2 E 2915	Sup. 2 C.I. 154	June 20-14	Iron and steel commodities, I.C. Ry. stations to Montreal. New rates.
Sup. 39 E 2855	Sup. 39 C.Y. 31	June 23-14	Castings, iron or steel, Oshawa to Walkerville, c.l., 17½c. per 100 lbs. Reduction.
E 2944 cancels E 2933	C.W. 86 cancels C.U. 84	July 23-14	Slag, c.l., Black Rock, N.Y., to stations in Canada. Reduction.
E 2946 cancels E 1314	C.P. 107 cancels C.P. 27	July 27-14	Woodpulp, c.l., Hawkesbury and Ottawa to points in the U.S. Reissue.
Sup. 40 C.R.C. E 2855	Sup. 40 R.R. No. C.Y. 31	June 30-14 Effective.	Wrought iron pipe, c.l., Description. Welland to Powassan, Ont., 16c. per 100 lbs. Reduction.
Sup. 42 E 2855	Sup. 42 C.Y. 31	Aug. 3-14	Commodities between G.T. stations and to and from connecting lines. Advance. Reduction.
Sup. 41 E 2855	Sup. 41 C.Y. 31	July 3-14	Nitrate, coke, c.l., Beloeil, P.Q., to Three Rivers, P.Q., 10c. per 100 lbs. Reduction.
Sup. 55 E 150	Sup. 55 G.B.Y. 5	July 6-14	Steel bars, c.l., Hamilton to Weston, Ont., 8½c. per 100 lbs. Reduction.
E 2948 cancels E 1309	T 6 cancels T 3	Aug. 4-14 (A) July 8-14 (R)	Class rates between G.T. stations, Toronto, Orillia and east to Dorval, including Ottawa Div. East of Scotia Jct., to St. Polycarpe. Advance. Reduction.
Sup. 20 E 2684	Sup. 20 C.W. 72	Aug. 6-14	Commodities between G.T. stations and points in Eastern U.S. Reduction.

Pere Marquette Railroad.

Sup. 7 1757	Sup. 7 5338	Aug. 10-14	Commodities between P. M. stations in Canada and to connecting lines. Reissue. Reduction.

Michigan Central Railroad.

Sup. 15 2049	Sup. 15 9353	Sep. 5-14	Commodities between M. C. stations in Canada and to connecting lines.
Sup. 4 1916	Sup. 4 9185	Aug. 25-14	Class rates Buffalo, Black Rock and Suspension Bridge to points in Canada.
Sup. 32 1751	Sup. 32 8764	Sep. 1-14	Commodities Buffalo, Black Rock and Suspension Bridge, N.Y., to points in Canada.

New York Central and Hudson River R. R.

3128	A 30048	July 23-14	Scrap copper, Montreal to Newark, N.J., 22c. per 100 lbs.

Baltimore and Ohio Railroad.

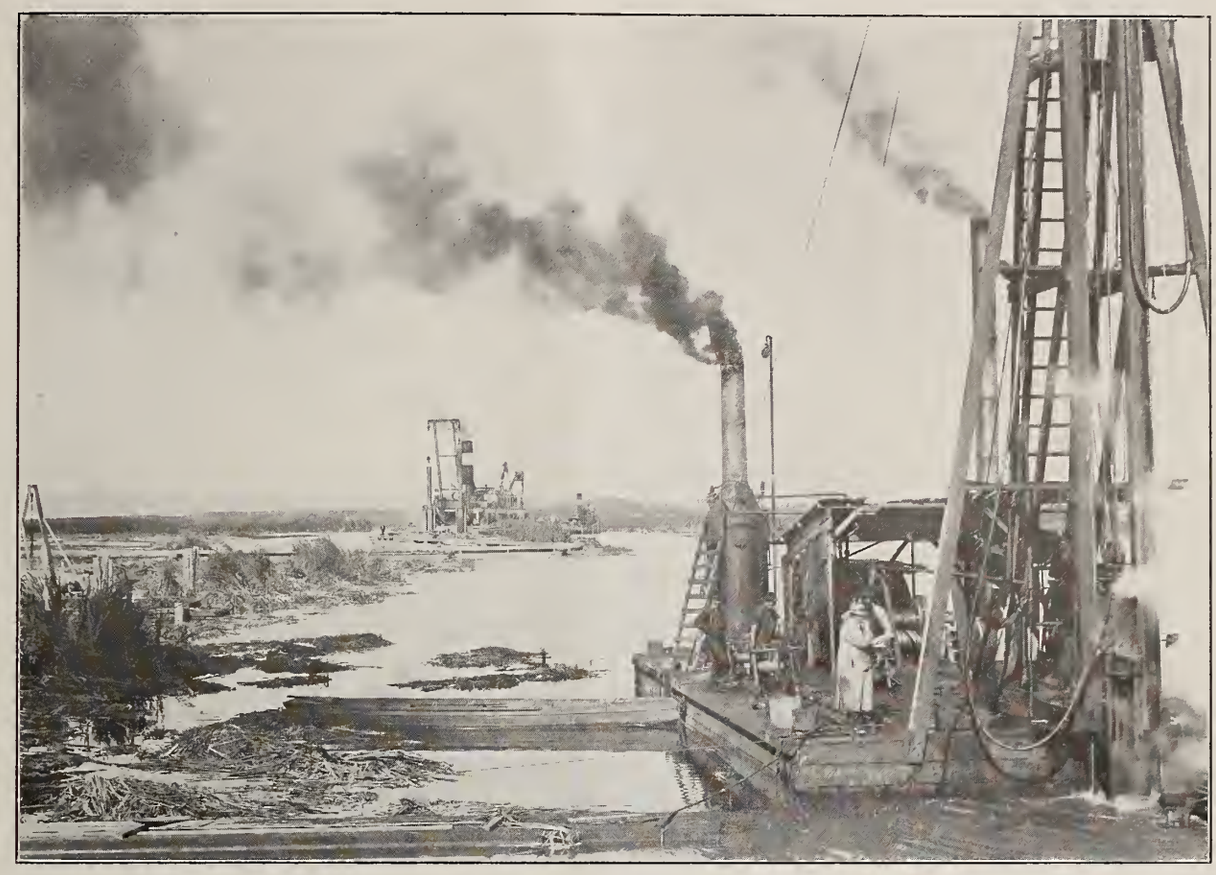
Sup. 10 1035	....	July 21-14	Iron and steel articles, B. & O. stations to points in Canada.

Cleveland, Cincinnati and St. Louis Ry.

Sup. 15 318	Sup. 15 525 A	Aug. 1-14	Commodities C.C.C. & St. L. stations to points in Canada.

PROCESSES COMING BACK TO THEIR OWN AT CANADIAN NATIONAL EXHIBITION.

The Processes are coming back to the Canadian National Exhibition, Toronto. Last year the Austrian exhibit chased the whirring wheels out of their home in the Process Building. This year the manufacture of goods will be resumed. A prominent exhibit will be a joint one in which A. R. Clarke, the United Shoe Machinery Co., the Minister-Myles Co. and the T. Eaton Co. will get together and show the entire process of turning a hide into a shoe. There will be many another process besides, and this department, always one of the most popular of the entire Exhibition, will come into its own again.



CONSTRUCTING A SHIP CHANNEL IN THE TORONTO HARBOR INDUSTRIAL DISTRICT

THE WAR WILL NOT STOP THIS WORK

SECURE A SITE NOW

In this Modern Factory District and be ready for the Business which will flow into Canada when the Peace of the World is secured.

THREE RAILWAYS FREE SIDINGS
FREE INTERSWITCHING

TORONTO HARBOR COMMISSIONERS

50 BAY ST. ALEX. C. LEWIS, Secretary TORONTO, CANADA

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

189. **Calcium Carbide.**—A South African importer wishes to be put in touch with Canadian exporters of calcium carbide.

190. **Carriage Building Material.**—A South African importer asks for catalogues with f.o.b. prices on Canadian Carriage building material.

191. **Motor Cars.**—Inquiry is made by a South African firm for catalogues with f.o.b. prices.

192. **Condensed Milk.**—A South African importer asks for quotations on Canadian condensed milk.

193. **Fencing Material.**—Inquiry is made by a South African merchant for quotations on Canadian-made fencing material of all kinds.

195. **London Agency.**—A London firm claiming to have experience in dealing in a wide range of materials, is seeking the agency for Canadian shippers of chemicals, minerals, petroleum and wood distillation products, crude or refined materials for manufacturing purposes, etc. They would also act as buying agents for apparatus or manufacturing plant, mills, stamps, general steam plant, etc.

196. **Box Shooks.**—A London importer of box shooks wishes to obtain supplies from Canada upon a commission basis, and would be glad to receive quotations upon specification, details of which are procurable from the Department of Trade and Commerce.

197. **Flour.**—Samples and quotations on Canadian flour are requested by a South African firm.

198. **Evaporated Apples.**—Inquiry is made by a South African importer for f.o.b. quotations on Canadian evaporated apples.

199. **Furniture, Household.**—A South African importer makes inquiry for catalogues with f.o.b. prices on Canadian household furniture, to be packed in knock-down state.

200. **Furniture, Office.**—Inquiry is made by a South African importer for illustrated catalogues with f.o.b. prices on Canadian-made office furniture.

201. **Handles, All Kinds.**—Catalogues with f.o.b. prices are inquired for by a South African importer.

202. **Hardware.**—A South African importer would like to get in touch with Canadian manufacturers and exporters of hardware of all kinds.

203. **Machinery, Agricultural.**—A South African importer asks to be placed in touch with manufacturers and exporters of Canadian-made agricultural machinery.

204. **Machinery, Cranes and Elevators.**—A South African importer asks for catalogues with f.o.b. quotations on cranes and elevators.

205. **Machinery, Mining.**—Inquiry is made by a South African importer for catalogues with f.o.b. quotations on Canadian-made mining machinery.

206. **Machinery, Sawing.**—A South African importer wishes to communicate with Canadian manufacturers and exporters of sawing machinery.

207. **Evaporated Fruits.**—Quotations for apples, peaches, etc., are wanted by a French firm.

208. **Fruit Evaporators.**—A French concern is desirous to get in touch with Canadian manufacturers of such machines.

209. **Machines, Washing.**—A South African importer asks to be put in touch with Canadian exporters of washing machines. Catalogues with f.o.b. prices requested.

210. **Paints and Oils.**—Inquiry is made by a South African importer for f.o.b. quotations on Canadian paints and oils.

211. **Paper, Wrapping.**—Samples and prices are asked for by a South African firm.

212. **Paper Bags.**—Samples and prices are asked for by a South African importer.

213. **Stepladders.**—A South African importer asks for catalogues with f.o.b. prices on Canadian stepladders.

214. **Wheat.**—Samples with prices are asked for by a South African firm.

215. **Box Shooks.**—A South African importer asks for f.o.b. quotations on Canadian-made box shooks.

216. **Pine Doors.**—Inquiry is made by a South African importer for quotations on Canadian pine doors.

217. **Lumber, Planed and Grooved.**—A South African firm asks for quotations on Canadian lumber, planed and grooved.

218. **Woodenware.**—Inquiry is made by a South African firm for quotations f.o.b. on Canadian woodenware of all kinds.

219. **Brushware.**—A South African importer would like to receive catalogues with f.o.b. prices on Canadian-made brushware.

220. **Dairy Machinery and Accessories.**—A South African importer makes inquiry for catalogues with f.o.b. prices on Canadian dairy machinery and accessories.

221. **Fencing Material.**—A South African importer asks for catalogues with f.o.b. quotations on Canadian fencing of all kinds.

222. **Furniture, Household.**—A South African importer asks to be put in touch with Canadian manufacturers of Canadian household furniture to be packed in knock-down state. Catalogues and f.o.b. prices requested.

223. **Furniture, Office.**—Price lists and illustrated catalogues are desired by a South African importer.

224. **Hardware.**—Inquiry is made by a South African merchant for catalogues with f.o.b. quotations on Canadian hardware of all kinds.

225. **Machinery, Agricultural.**—A South African importer makes inquiry for catalogues with f.o.b. prices on Canadian agricultural machinery.

226. **Machinery, Milling.**—Inquiry is made by a South African importer for illustrated catalogues with f.o.b. prices on Canadian-made machinery.

This is the way many manufacturers are saving money

Scores of the leading manufacturers have seen the wisdom of equipping their plants with

Manufacturers' Automatic Sprinklers



Because : Beside providing absolute protection from fire, their installation cuts insurance premiums from 30 to 80 per cent.

The cut in insurance will pay for installing in from three to five years.

Protect your factory and save money by installing MANUFACTURERS' AUTOMATIC SPRINKLERS.

THE GENERAL FIRE EQUIPMENT COMPANY LIMITED

72 QUEEN ST. EAST TORONTO, CANADA

227. **Machines, Washing.**—Catalogues with f.o.b. prices are asked for by a South African importer.

228. **Stoves.**—A South African importer asks to be put in touch with Canadian manufacturers and exporters of stoves. Illustrated catalogues with f.o.b. prices requested.

229. **Duck.**—A South African importer asks for samples with prices on Canadian-made duck for tent-making.

230. **Hardware.**—Inquiry is made by a South African importer for catalogues with f.o.b. prices on all kinds of Canadian hardware.

231. **Organs.**—A South African importer asks to be put in touch with Canadian manufacturers and exporters of organs. Catalogues with f.o.b. prices requested.

232. **Stoves.**—Illustrated catalogue with f.o.b. prices asked for by a South African importer.

233. **Bacon and Hams.**—A South African importer asks to be put in touch with Canadian exporters of bacon and hams; f.o.b. prices requested.

234. **Brushware.**—Catalogues with f.o.b. quotations are asked for by a South African importer.

235. **Fencing Material.**—A South African importer asks for f.o.b. prices on Canadian fencing material of all kinds.

236. **Evaporated Apples.**—Inquiry is made by a South African importer for samples and quotations on Canadian evaporated apples.

237. **Furniture, Household.**—A South African importer asks for catalogues with f.o.b. quotations on Canadian furniture packed in knock-down state.

238. **Furniture, Office.**—A South African importer inquires for catalogues with f.o.b. prices on Canadian-made office furniture.

239. **Handles, All Kinds.**—Catalogues with f.o.b. prices are inquired for by a South African importer.

240. **Hardware.**—A South African importer asks for catalogues with prices on Canadian-made hardware of all kinds.

241. **Paints and Oils.**—A South African importer asks to be placed in touch with Canadian manufacturers and exporters of paints and oils.

242. **Paper, Wrapping.**—Samples with f.o.b. prices are asked for by a South African importer.

243. **Paper Bags.**—Samples and f.o.b. prices are asked for by a South African merchant.

244. **Canned Lobster.**—A broker in Paris who can dispose of fairly large quantities of tinned lobster would like to receive quotations from Canadian canners.

245. **Wheat.**—An important commission merchant in Paris, in view of anticipated shortage of French crop, wishes to get into communication with wheat exporters

246. **Pulp and Paper.**—British house, old established, of highest standing, with first-class references, wants agency of good pulp and paper mills; cash advances and financial facilities granted.

High-Grade
12" Combination Grinder & Polisher



We manufacture all kinds of Grinders and Polishers, both belt and motor driven. The above machine is built in sizes, from 6 in. up to 18 in. wheels, and is a most handy tool in any shop, for trimming tools, castings, etc., and buffing all kinds of work.

The Ford-Smith Machine Co., Ltd.
HAMILTON, CANADA



MADE IN CANADA

Canadian Hart Wheels

CUT FASTER LAST LONGER
Than any other wheels on the market

Tell us the service you want performed and we will supply you with an abraser that will save you time, money and worry.

Send for one of our catalogues and tell us your troubles. We do the rest. :: :: :: ::

CANADIAN HART WHEELS LIMITED
450 BARTON ST. EAST
Hamilton :: :: :: Ontario

247. **Wrapping and Toilet Paper.**—A Havana firm of commission merchants is open to represent first-class Canadian manufacturers of wrapping and toilet paper.

248. **Box Shooks.**—A London firm claiming a large connection among users of box shooks suitable for fruit and flowers, would be glad to consider offers from Canadian sawmills.

249. **Canned Goods.**—Inquiry is made by commission merchant in Havana for the names of Canadian exporters of canned goods.

250. **Chocolates (in bulk and packages).**—A commission merchant in Havana inquires for Canadian manufacturers of chocolates (in bulk and package) similar to those manufactured by Fry and Cadbury.

251. **Condensed Milk.**—A Havana broker is anxious to secure a first-class Canadian representation of condensed milk.

252. **Groceries.**—A leading firm in Havana inquires for Canadian exporters of groceries.

253. **Furniture.**—A firm of brokers in Havana wishes to represent Canadian manufacturers of furniture. Good references offered.

254. **Beds (Brass).**—A leading commission merchant in Havana is anxious to get in touch with the Canadian manufacturers of beds. First-class references offered.

255. **Desks (Office).** A leading firm in Havana is anxious to represent a Canadian manufacturer of low-price office desks. Good references offered.

256. **Handles.**—A Manchester firm asks to be placed in communication with Canadian manufacturers of hickory sledge and pick handles, of which they are large importers.

257. **Box boards.**—A London manufacturing company is in the market for a quantity of box boards, and would be glad to receive quotations upon the specifications obtainable upon application to the Department of Trade and Commerce, Ottawa.

258. **Tool Handles.**—A commission agent calling on the principal hardware merchants in Glasgow is desirous of representing Canadian manufacturers of tool handles.

259. **Parts for Bedroom Furniture.**—A Scotch furniture house is desirous of purchasing parts for bedroom furniture in oak and ash. Must be completely fitted with dovetails and ragled ready for gluing and clamping together. The goods to be shipped in cases containing gables, tops and fronts.

260. **Hosiery.**—Canadian manufacturers of hosiery are invited to correspond with a good firm of commission merchants in Havana.

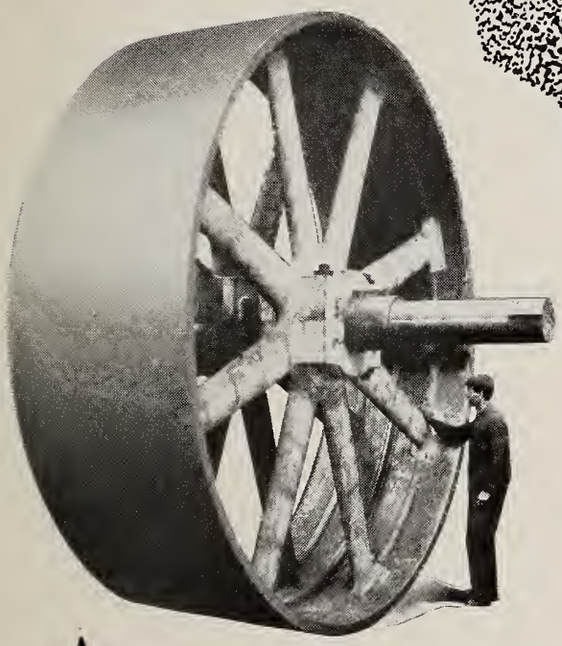
261. **Leather.**—Canadian manufacturers of leather desiring to appoint a selling agent for Cuba should correspond with firm in Havana.

262. **Spruce Box Boards.** A London firm wishes to obtain supplies of cheap spruce box boards and invites quotations per 1,000 boxes from Canadian manufacturers. Details of specifications are available at the Department.

JAMAICA STOPS SUGAR EXPORTS.

The Governor has issued a proclamation forbidding the exportation of sugar from Jamaica. It is explained that the product is required for Imperial purposes.

BIG WORK



Why tie up your plant trying to handle work too large for your machines? Put your ***big work*** up to us.

We have the shop, the equipment and the men to handle this class of work as it should be. We have specialized in jobs that require skilled handling and that can be done only in a first-class, exceptionally well-equipped, big shop.

If your job has special difficulties, we will solve them for you. We guarantee that our workmanship and prices will be right.

THE WATEROUS ENGINE WORKS CO., LTD.

BRANTFORD - - - CANADA

BERRY BROTHERS' CELEBRATED TRADE MARK BRILLIANT. DURABLE. UNEXCELLED VARNISHES WALKERVILLE

The Mark of Varnish Service That Satisfies

Berry Brothers' Varnishes have a world-wide reputation for satisfactory and lasting service.

Every Berry Brothers' product is sold under the Berry Brothers' trade mark—which guarantees its high quality and purity.

Fifty-six years of honest manufacturing experience are behind all

BERRY BROTHERS' VARNISHES

including these three well-known brands:

Liquid Granite

A floor varnish that gives a tough, elastic surface that resists wear and is lastingly beautiful. Scrubbing with soap and hot water does not dim its lustre.

Luxeberry White Enamel

For white interior finishing a durable white enamel that stays white—does not check nor fade.

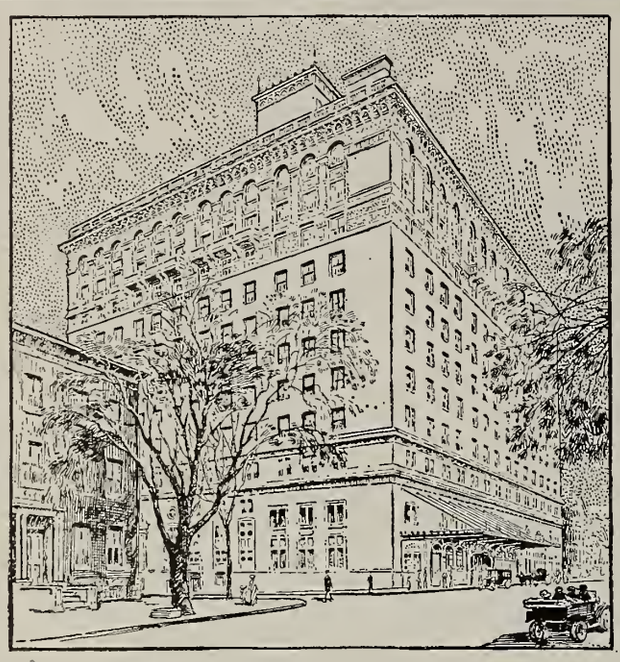
Luxeberry Wood Finish

For the finest rubbed or polished finish for interior woodwork.

Ask your dealer about these finishes or write us direct for any information you may desire on the Varnish question.

BERRY BROTHERS (INCORPORATED) World's Largest Varnish Makers

Established 1858 Walkerville, Ont.



The Ritz-Carlton Hotel

SHERBROOKE STREET, MONTREAL

offers the Comfort, Service and Cuisine of the famous Ritz chain of Hotels and Restaurants round the world, at similar rates to those of other leading hotels in Canada.

3

Goold, Shapley & Muir Co.

LIMITED

BRANTFORD : WINNIPEG : REGINA : CALGARY

MANUFACTURERS OF

GAS AND GASOLINE ENGINES



TANKS AND TOWERS FOR Sprinkler Systems

TOWN WATER SUPPLY ETC., ETC

PUMPS

CONCRETE MIXERS

HOISTS, Etc.

Write, if interested

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Edmonton, Alta.

J. P. Scott, of the McMullen Block, proposes to erect a pottery factory.

Medicine Hat, Alta.

The Saskatchewan Bridge & Iron Company is now employing a large force of men in the completion of their new plant, the steel work being already up.

Redcliff, Alta.

The Imperial Brass Manufacturing Company of Chicago has closed a contract for a factory at Redcliff and will commence construction at once.

BRITISH COLUMBIA.

Burnaby, B.C.

Construction will soon be commenced on the new plant of the Royal Crown Soaps, Limited. The total expenditure will be upwards of $250,000, and the factory when in operation will give employment to about 100 hands.

Nelson, B.C.

A. T. Eyton, of Nelson, previously manager of the North Wales Smelting and Manufacturing Works, claims to have perfected a new process for producing pure basic carbonate white lead by which a great saving in time and cost of production is secured. A temporary experimental plant for demonstration purposes has been erected, and it is proposed to test out the process on a commercial scale shortly.

New Westminster, B.C.

Considerable progress is being made by the British Columbia Milk Company on their new factory near here. The plant includes a 50,000 gallon water tank and boiler and power plant housed in a separate building. A spur of the G. N. R will be run into the factory.

The Morrison Nail and Iron Works, of Vancouver and New Westminster, intend disposing of their property on Lulu Island and transferring the plant to New Westminster, where they will build a factory with trackage facilities.

Prince Rupert, B.C.

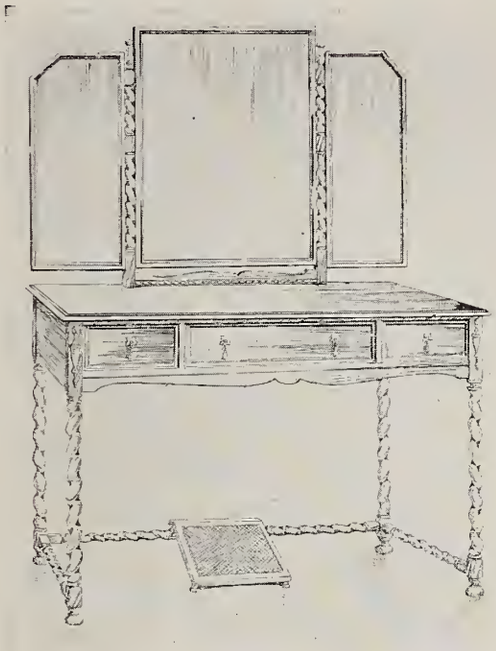
Tenders have been called for the erection of a post office here to cost $100,000.

Vancouver, B.C.

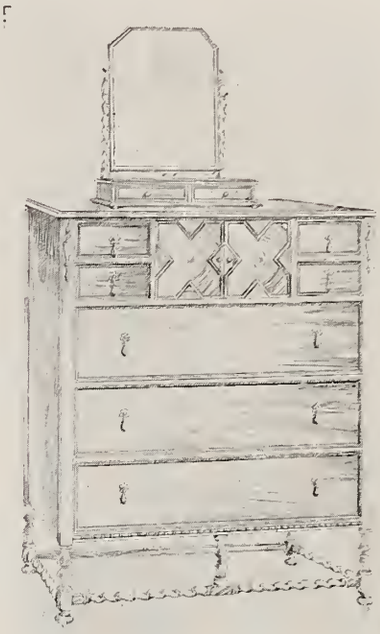
From September 3rd to 12th the annual Vancouver Exhibition will take place at the splendidly arranged Exhibition Park in the vicinity of Vancouver. The Manufacturers' Building, which formerly was given over to general manufactured products, will this year be entirely occupied by exhibits of B. C. manufactures, the space now being entirely arranged for by the Manufacturers' Association of B. C.

The Simonds Canada Saw Company, Limited, whose factory is in Montreal, have bought out the saw manufacturing and repair business of the A. J. Burton Saw Company of Vancouver, latterly known as the Standard Saw Works, Limited.

FINE PERIOD FURNITURE



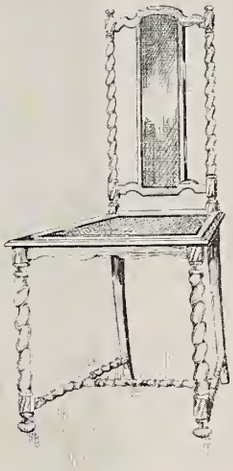
JACOBEAN



WITH the increasing display of good taste in home furnishing, and the demand for better furniture, there has come a keener appreciation of the types belonging to the Charles or Jacobean period.

We show here, reproductions in black walnut, which have all the appearance of the genuine antiques, including the lustrous patina that age brings.

In every point of construction, design and finish, these pieces will be found to bear favorable comparison with the originals from which they are copied. Anything more beautiful in furniture could scarcely be conceived than a dining-room set with Jacobean pieces — the soft, warm, mellow tones of the black walnut forming an effective setting for the snowy drapery, sparkling cut glass and gleaming silver.



Look for our Shop-mark in selecting furniture. It assures you of authentic design and thorough workmanship.

It is plenishings such as these that add beauty, grace and distinction to a home and impart to it an air of dignity and character.

In its simplicity, pleasing lines and artistic decoration, this Jacobean suite caters to the demand for art and utility and fittingly epitomizes the spirit of modern home decoration which prefers ornamented construction to the mere construction of ornament.

This Jacobean suite is made in solid mahogany, antique finish as well as in black walnut. You are invited to view this and other reproductions of notable periods at the representative dealers in your town. We shall be glad to send you his name upon request, also a copy of our booklet on period furniture, handsomely illustrated.

TORONTO FURNITURE CO., LIMITED

Showrooms and Factory: DUFFERIN ST., TORONTO

ALSO AT THE TORONTO NATIONAL EXHIBITION



WE hope to see many of our Customers at

THE EXHIBITION

Aug. 29th to Sept. 12th

Our Booth is at the old spot in the

INDUSTRIAL BUILDING.

We have something new to interest you as usual.

The

Geo. B. Meadows

Wire, Iron & Brass Works Company Limited

479 West Wellington Street

Toronto

West Bridge, B.C.

A large sawmill will be built by the White Pine Lumber Company of Spokane near West Bridge, about thirty miles from Greenwood. The mill has a capacity of 200,000 feet per day.

MANITOBA.

Winnipeg, Man.

The President of the American Well Works, Chicago, accompanied by his chief engineer, is considering the possibilities and inducements that Winnipeg has to offer as a location for their Canadian factory.

NEW BRUNSWICK.

St. John, N.B.

The plant of the St. John Milling Company at West St. John, which was destroyed by fire a few days ago, involving a loss of $20,000, will be rebuilt at once. This was one of the most successful milling plants in the Province.

ONTARIO.

Berlin, Ont.

The Berlin Central Heating Company has been purchased by a Toronto syndicate. It is proposed to make considerable extensions to the plant.

Brampton, Ont.

Tenders will be called shortly for the erection of a jam factory for Lindner's, Limited, Toronto.

Brantford, Ont.

Operations are now going on for the reconstruction of the Canada Glue Works at Echo Place, after the fire that destroyed the plant there last April.

Brockville, Ont.

At an estimated cost of $15,000, the James Smart Mfg. Company are about to replace the old frame building, recently burned, with a concrete and steel.

Cobourg, Ont.

A new industry is being promoted here by Geo. Thomson, of the Thomson-Macdonald Company, for the manufacture of drain tile.

Dundas, Ont.

The Mercury Mills, Limited, of Hamilton, has taken a two years' lease of one of the plants in the old cotton mill, now used by the Chapman Engine Works, and intends establishing a branch factory here.

ASBESTOS

WE CARRY THE LARGEST COMPLETE STOCK IN CANADA

ASBESTOS SHINGLES
ASBESTOS LUMBER
ASBESTOS MILLBOARD
ASBESTOS PAPER
ASBESTOS PACKING
ASBESTOS ROOFING
ASBESTOS PIPE COVERING
ASBESTOS CEMENT
ASBESTOS CURTAINS

CANASCO RUBBER ROOFING 1, 2 AND 3 PLY
COTTON WASTE, WHITE AND COLORED, AND WOOL WASTE
OAKUM, PLUMBERS AND NAVY
BEAVER BOARD
RAILWAY AND ENGINEERS' SUPPLIES

WE EMPLOY A LARGE STAFF OF EXPERIENCED WORKMEN AND UNDERTAKE THE COVERING OF STEAM PLANTS AND COLD STORAGE ANYWHERE IN CANADA.

CANADIAN ASBESTOS COMPANY

42 TO 48 YOUVILLE SQUARE MONTREAL MAIN 332 AND 611

POLSON IRON WORKS
LIMITED
Toronto - Canada

STEEL SHIPBUILDERS
ENGINEERS AND
BOILERMAKERS

Hydraulic and Dipper Dredges, Steel and Composite Steamers and Yachts, Marine and Stationary Engines and Boilers. :: ::

Office and Works
ESPLANADE STREET EAST
Toronto

AGENTS FOR QUEBEC
WATSON JACK & CO.
709 Power Building - Montreal, Que.

Fort Frances, Ont.

A big real estate deal recently took place here which may result in the building of another paper mill. The Ontario and Minnesota Power Company are the purchasers.

Fort William, Ont.

The N. M. Patterson Elevator Company have announced that they will erect a grain elevator, the first unit of what is eventually to be a one million bushel terminal grain elevator. The first unit to be constructed will be of 100,000 bushels capacity and will be equipped with the latest model of cleaning and drying machinery.

The Canadian Westinghouse Co. of Hamilton, one of the largest manufacturers of electrical equipment, have opened an office and warehouse here.

Grimsby, Ont.

The Consumers' Box & Lumber Company, Limited, Toronto, are considering the rebuilding of their basket factory recently destroped by fire.

Hamilton, Ont.

The proposed alterations and additions to the factory of the Chipman & Holton Knitting Company have been postponed indefinitely.

The Stanley Steel Works Company of New Britain, Conn., has absorbed the Canada Steel Co. The new company will enlarge the present building and erect rolling mills, for which new machinery will be required.

The Canada Malting Company purposes putting a new roof on their malt house and all premises; probably metal or slate will be the material used.

Mayor Allen announced that it is almost certain that the United Gas & Fuel Company will build a $1,500,000 coke and gas plant here.

Iroquois Junction, Ont.

The first pulp ever manufactured in Timiskaming was made on July 29th in the big machines of the plant of the Abitibi Pulp and Paper Company. Regular production and daily shipments of pulp started last Monday.

Port Arthur, Ont.

The brick plant to be established on the property of the Canadian Resources Development Company will be in operation this fall.

Sarnia, Ont.

It is understood that Hon. W. J. Hanna, who is in England at present, is endeavoring to secure for this city the proposed Canadian branch of a large British concern.

Toronto, Ont.

Plans have been drawn for an addition to the Toronto Hat Block Company's premises.

Windsor, Ont.

The contract for the new branch factory of the Ideal Concrete Machinery Company has been closed and building will be started without further delay.

The Windsor Lumber Company proposes to erect a planing mill as soon as the Hydro system is in use. Up-to-date machinery driven by individual motors is to be installed.

Plans are being drawn for additions to the factory of the Central Ice & Storage Company. The estimated cost is placed at $10,000.

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASAVIAL MATERIALS
*The Ford-Smith Machine Co., Ltd., Hamilton.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.

ACETYLENE WELDING APPARATUS
*L'Air Liquide Society, Montreal, Que.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.
Hough Lithographing Co., Ltd., Toronto.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AGRICULTURAL IMPLEMENTS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

AIR HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

AIR WASHERS
*The Canadian Service Co., Windsor, Ont.

ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE
E. L. Drewry, Winnipeg, Man.

ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.

ANIMAL REGULATORS
Pratt Food Co., of Canada, Ltd., Toronto.

ARCHITECTS
*T. Pringle & Sons, Montreal.

ASBESTOS:
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS BUILDING LUMBER
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CEMENT SHINGLES
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CORRUGATED SHEATHING
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS MILLBOARD:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS PRODUCTS;
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS ROOFING SLATES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS SHEATHING:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS THEATRE CURTAINS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.

AUTOMATIC MACHINERY
*The Ford-Smith Machine Co., Ltd., Hamilton.

AUTOMATIC SPRINKLERS
*The General Fire Equipment Co., Ltd., Toronto. Ont.

AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

AWNINGS
J. J. Turner & Sons, Peterboro, Ont.
*Smart-Woods, Ltd., Montreal.

AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS
*Smart-Woods, Ltd., Montreal.

BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal, Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN
*Berry Bros., Ltd., Winnipeg, Man.

BALL BEARING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

BANK AND OFFICE RAILINGS
*The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston Ont.

BANK RAILINGS and CAGES:
*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London Ont.

BASEBALL GOODS
A. J Reach Co., Toronto.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst. N.S.

BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Goldie & McCulloch Co., Ltd., Gadt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville, Ont.
*Smart-Woods, Ltd., Montreal.

BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER
E. L. Drewry, Winnipeg, Man.

BELT FASTENERS
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELT DRESSING:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
J. L. Goodhue & Co., Danville, P.Q.
Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Goodyear Tire & Rubber Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

BELTING (stitched cotton duck)
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS
Samuel May & Co., Toronto.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:
*A. C. Leslie & Co., Montreal.

BLANK BOOKS:
*Morton, Philips & Co., Montreal.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.

BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS
Electric Boiler Compound Co., Ltd. Guelph, Ont.

BOILERS.
*Canadian Allis-Chalmers, Limited, Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, London, Ont
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Jenckes Machine Co., Sherbrooke.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, heating:
*The Goldie & McCullough Co., Ltd. Galt.

BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.

BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BOILER STANDS
Anthes Foundry Ltd., Toronto.

BOLSTERS
*Canadian Car & Foundry Co., Ltd. Montreal, Que.

BOLTS:
*The National Acme Mfg Co., Montreal.

BOLT CUTTERS:
*Canada Machinery Corporation, Galt.

BOLTS AND NUTS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co. Ltd., Stratford, Ont.

BOOKLETS
Stone Limited, Toronto.
R. G. McLean, Toronto.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,
Ames-Holden-McCready, Ltd., Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

* For Display Advertisement See Index, Page 107

THE CANADIAN BANK OF COMMERCE

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L.,
President

ALEXANDER LAIRD, General Manager
JOHN AIRD, Assistant General Manager

Capital - - $15,000,000
Rest - - $13,500,000

SAVINGS BANK ACCOUNTS

Interest at the current rate is allowed on all deposits of $1 and upwards. Careful attention is given to every account. Small accounts are welcomed. Accounts may be opened and operated by mail.

Accounts may be opened in the names of two or more persons, withdrawals to be made by any one of them or by the survivor.

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . . $25,000,000
Capital Paid up $11,560,000
Reserve & Undivided Profits $13,000,000
Total Assets $180,000,000

HEAD OFFICE, MONTREAL

BOARD OF DIRECTORS

H. S. Holt, President E. L. Pease, Vice-President
E. F. B. Johnston, K.C., 2nd Vice-President

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C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY — Corner William and Cedar Sts

Savings Department at All Branches

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.

SHEETS TUBES COPPER & BRASS AND RODS

SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT

115-121 SUMACH STREET - - - TORONTO, CANADA

METAL FINGER GUARDS.

The operation of machines for punching, stamping and pressing metals is often attended by a great deal of personal danger. The operator becomes careless, or his attention is momentarily diverted, or he relies too implicitly upon the dexterity that comes with long experience and training; and the result is that he loses a finger or a hand.

Presses and punches are of many different kinds, and the problem of safeguarding them is often extremely difficult. The best method of preventing accidents from the use of such machines consists in providing two operating handles, set some distance apart, and arranged so that the operator's hands must both be occupied, simultaneously, by the act of setting the machine in motion. Although this plan is the best of all, it cannot be applied with advantage in every case; and when it is not practicable, other methods of safeguarding must be devised.

Adequate protection may sometimes be afforded by the use of metal finger guards; guards of this kind are made in several sizes, to suit both men and women operators. A small hole at the end of the guard is drilled there to ventilate the space beyond the tip of the finger, and to facilitate the removal of the finger by preventing the formation of a partial vacuum in this space.

Finger guards are sometimes reinforced at the end, by making the tip considerably thicker than the main body of the guard. The reinforced guard is best.

The reinforced guard was the means of saving a finger. The machine caught the guard, and its progress was arrested when it struck the reinforced tip. The operator quickly pulled his finger out, but in so doing he changed the position of the guard so that the tip slipped out of the way of the die and allowed the machine to continue its downward motion, crushing the part of the guard that was not reinforced. The operator escaped without injury.—*American Industries.*

The Hare Engineering Company, Limited, 78 Duchess Street, Toronto, manufacturers of Mechanical Stokers and Power Plant Equipment, have appointed Messrs. Frank Darling and Company, 1142-1144 Homer Street, Vancouver, their British Columbia agents.

The Bell factory of the Canada Furniture Company at Wingham is at present undergoing repairs.

BOWLING ALLEYS
Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.
Samuel May & Co., Toronto.

BOXES, cellular board:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
G. & J. Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAIDS AND NOVELTIES:
The Moulton Mfg. Co., 236 Craig St. E., Montreal.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS GOODS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
*Tallman Brass & Metal Co., Hamilton.

BRASS PLATES
Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS
Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

BRICK
National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway
*Canada Foundry Co., Ltd., Toronto.
Canadian Allis-Chalmers Ltd., Toronto.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters
Geo. Booth & Son. Toronto.

BROOMS
*Boeckh Bros. Co., Ltd., Toronto.
H. W. Nelson & Co., Toronto.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:
*Boeckh Bros., Ltd., Toronto.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd. Toronto.

BUCKET TANKS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUFFING and Polishing Machinery.
*The Ford-Smith Machine Co., Ltd., Hamilton.

BUILDING BLOCKS, vitrified, salt glazed
Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING GRANITE
McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir. Montreal, Que.

BURLAPS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE:
*Northern Electric Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:
*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS
Hough Lithographing Co., Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CALENDARS, ADVERTISING NOVELTIES, etc.
Rolph & Clark, Ltd., Toronto.

CAMERAS
Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

CANVAS
*Smart-Woods, Ltd., Montreal.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PAPER:
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

CARBON PRODUCTS
Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
Canada Carbide Co., Ltd., Montreal, Que.

CARPETS AND RUGS
Toronto Carpet Mfg Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.
*Richard-Wilcox Canadian Co., Limitd, London, Ont.

CARRIERS, box and barrel
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*Wm. & J. G. Greey, Toronto.

CARS, industrial:
*Wm. & J. G. Greey, Toronto.
*Sheldons, Ltd., Galt.

CARTONS, lithographed
Harris Lithographing Co., Toronto.

CASEMENTS, steel
*Herbert Morris Crane & Hoist Company, Ltd.

CASTINGS:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

CASTINGS, brass and bronze:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:
*Galt Malleable Iron Co., Ltd Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CAST IRON PIPE:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

CATALOGUE MAKERS
Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIN BLOCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Herbert Morris Crane & Hoist Company, Ltd.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS
J. M. Fortier, Limited, Montreal.
Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO
J. M. Fortier, Ltd., Montreal.
Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel
The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S
*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

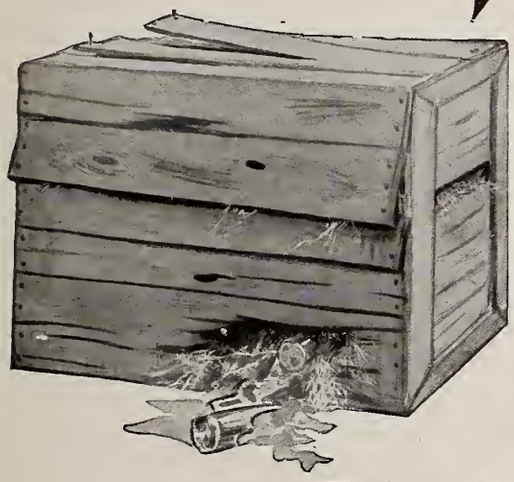
*For Display Advertisement See Index, Page 107

HOW DOES YOUR PRODUCT LOOK WHEN IT ARRIVES AT ITS DESTINATION?

Do you want it to reach your customer or agent in a battered, splintered case, bruised and damaged—do you want your customer to get that kind of first impression? Do you like to be always negotiating over the replacement of damaged goods and return freight charges?

H. & D. Corrugated Board Fibre Boxes

Or do you want your product to arrive in a condition that will draw further trade instead of repulsing it? Clean and fresh—just as attractive as when it was packed? Don't you want your printed label on the package to be fresh and readable and the consignee's name perfectly legible and intelligible?



will protect your shipment against water, damp, damage—and the goods will be removed by your customer in just as good condition as when packed. Wood has become so expensive that it is not economy to use it for packing cases. But even if H. & D. Corrugated Fibre Board Boxes were not cheaper, they would still be vastly superior for any package weighing less than 100 pounds. Although they cost less and are a great deal lighter, they are five times as strong and have greater carrying power. The cellular construction of the board makes the cases so resilient that they will stand most extraordinary rough handling and abuse.



Trim Down Your Freight Bills

Save on each shipment the unnecessary expense occasioned by the greater weight of wood. H. & D. Corrugated Fibre Board Boxes will help you to make this saving and will put the shipment into your customer's place of business in better condition. Not only do the contents of the case go better in H. & D. Corrugated Fibre Boxes, but the box itself with its attractive monogram in colors, retains its freshness and attractive appearance when a wood box would be cracked and battered and not fit to be receipted for at the customer end.

Write us what you ship and ask for our free booklet "How to Pack It." We want to prove to you that you need H. & D. Corrugated Fibre Board Boxes in your business.

Let Us Design a Sample For Your Product

No matter what you have for shipment, we can design a better, cheaper, more satisfactory packing case than you are now using — a case that will save you 10 p.c. to 87 p.c. in freight charges — 25 p.c. to 50 p.c. in packers' time — 90 p.c. of your storage space. A saving in freight charges because the H. & D. Corrugated Fibre Board Cases are so much lighter than wood. A saving in packers' time because an H. & D. Case can be set up and sealed in one-half the time a wood box can be procured and nailed. A saving in storage space because a thousand H. & D. Cases can be stored in the space ten of your wood cases now occupy. We will gladly design a specimen case for you to specially fit your needs—that you may examine and test and prove. This will cost you nothing —involve no obligation. It will illustrate not only the economy and the efficiency of H. & D. Cases, but the better advertising value.



Write us to-day for full information.

THE HINDE & DAUCH PAPER CO.
LIMITED

TORONTO CANADA



CLUTCHES, conveyors.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.

COATS
Peerless Overall Co., Rock Island, Que.

COBALT OXIDE
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COCOA AND CHOCOLATE PREPARATIONS
Walter Baker & Co., of Canada, Ltd., Montreal, Que.

COFFEE
S. H. Ewing & Sons, Montreal, Que.

COFFEE IMPORTERS, Roasters and Manufacturers
C. H. Cochrane & Co., Ottawa, Ont.

COLD DRAWN SCREW STEEL:
*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD DRAWN SHAPES, flats, squares and hexagons:
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS
The Arlington Co., of Canada, Ltd., Toronto.

COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.

COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.

COLLARS AND CUFFS waterproof
Williams, Greene & Rome, Berlin, Ont.

COLORS
Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin Williams Co. of Canada, Ltd., Montreal, Que.

COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERS
Rolph & Clark, Ltd., Toronto.

COMMERCIAL STATIONERY:
*Brown Bros,, Ltd., Toronto.
*Morton, Phillips & Co., Montreal.

COMPRESSORS
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

CONCENTRATORS:
*Jenckes Machine Co., Sherbrooke.

CONCRETE COATINGS, paints, etc.
The Imperial Varnish & Color Co., Ltd., Toronto.

CONDUITS FOR INTERIOR WIRING
*Conduits Company, Ltd., Toronto.

CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Limited, Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTRACTORS' PLANT
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CONVEYORS:
*Dodge Mfg. Co.. Ltd.. Toronto.
*Wm. & J. G. Greey, Toronto.
*Jenckes Machine Co.. Sherbrooke.

COOLING APPARATUS
*The Canadian Service Co., Ltd., Windsor, Ont.

COPPER:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS
*The Booth-Coulter Copper and Brass Co.. Ltd., Toronto.

COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd.. Toronto.
*Booth-Coulter Copper & Brass Co., Ltd.. Toronto.

COPPERWARE AND LANTERNS
Sheet Metal Products Co. of Canada. Ltd.. Toronto.

COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

CORDS, braided, spun, knitted
The Moulton Mfg. Co., 236 Craig St. E., Montreal.

CORKS
S. H. Ewing & Sons. Montreal. Que.

CORK BOARD INSULATION
*Robinson Bros. Cork Co., Ltd., Toronto.

CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORK, granulated
*Robinson Bros. Cork Co., Ltd., Toronto.

CORRUGATED BOXES:
*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COTTON TEXTILES:
*Dominion Textile Co., Montreal.

COUPLERS
*Canadian Steel Foundries, Ltd.. Welland, Ont.

COUPLERS, steel bar:
*Canadian Steel Foundries, Ltd., Montreal.

COUPLINGS:
*Dodge Mfg. Co.. Ltd.. Toronto.
*Wm. & J. G. Greey, Toronto.

CRANES:
*Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.

CRANKSHAFTS
Canada Forge Co., Ltd., Welland, Ont.

CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Ltd.. Montreal, Que.

CREAMERY AND CHEESE FACTOR MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Peterboro, Ont.

CREOSOTED MATERIALS:
*The Dominion Creosoting Co.. Ltd. Vancouver, B.C.

CRUSHERS, rock.
*Canadian Allis-Chalmers, Limited, Toronto.

CRUSHING ROLLS:
*Jenckes Machine Co., Sherbrooke.

CUES
Samuel May & Co., Toronto.

CUFFS
The Standard Shirt Co., Ltd., Montreal, Que.

CUPOLAS,
*Sheldons, Ltd.. Galt.
The Northern Crane Works, Ltd., Walkerville.

CUPS, presentation
Standard Silver Co., Toronto.

CUPS, grease and oil
*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR
Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DESIGNERS
Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.
Grip, Ltd., Toronto.

DINING ROOM SUITES
The George McLagan Furniture Co., Limited, Stratford, Ont.

DIES
*Butterfield & Co., Rock Island, P.Q.

DISC GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

DISINFECTING APPARATUS
Spramotor Co., London, Ont.

DOOR HANGERS
*Canadian Allis-Chalmers, Ltd., Toronto.
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS
Daly & Morin, Montreal, Que.

DREDGES
*M. Beatty & Sons, Ltd., Welland, Ont.

DRESSING. belt
Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:
*Canada Machinery Corporation, Galt.
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

DRILLS, rock
*Canadian Allis-Chalmers, Ltd., Toronto.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:
*Canadian Billings & Spencer, Ltd., Welland.

DROP HAMMERS:
*Canada Machinery Corporation, Galt.

DRY CELLS, electric
Canadian Carbon Co., Ltd., Toronto.

DRY COLORS
P. D. Dods & Co., Ltd., Montreal, Que.
The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd.. Windsor, Ont.

DRY KILN EQUIPMENT
*The Canadian Service Co., Ltd., Windsor, Ont.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.

DYERS AND FINISHERS
R. Parker & Co., Toronto.

DYNAMITE
Canadian Explosives Ltd., Montreal, Que.

DYNAMOS.
*Canadian General Electric Co., Ltd., Toronto.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN
Galt Knitting Co.. Ltd.. Galt.

ELECTRIC APPLIANCES.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd. Hamilton.

ELECTRIC BATTERIES.
*Canadian General Electric Co., Ltd., Toronto.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd.. Montreal, Que.

ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg Co.. Ltd., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.
*Canadian General Electric Co., Ltd., Toronto.
*Packard Electric Co.. Ltd., Toronto.

ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto.

ELECTRIC BATTERIES
Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING
Central Press Agency, Toronto.

ELECTRICAL SUPPLIES
*Canadian General Electric Co.. Ltd.. Toronto.
*Canadian Westinghouse Co., Ltd. Hamilton.
Crouse-Hinds Co. of Canada, Toronto.
*The Canadian Fairbanks-Morse Co.. Ltd., Montreal, Que.

ELECTRICAL SUPPLIES
*Jones & Moore Electric Co., Ltd., Toronto.
*Munderloh & Co., Montreal.
*Northern Electric Co., Ltd., Montreal, Que.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto.

ELEVATORS:
*Jenckes Machine Co., Sherbrooke.
Turnbull Elevator Mfg. Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.

ELEVATORS, hydraulic and electric
John McDougall Caledonian Iron Works Co.. Ltd.. Montreal. Que.

EMERY DRESSERS and STANDS
*The Ford-Smith Machine Co., Ltd., Hamilton.

EMERY GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

EMERY WHEELS
*The Ford-Smith Machine Co., Ltd., Hamilton.

EMERY WHEEL GUARDS
*The Ford-Smith Machine Co., Ltd., Hamilton.

EMERY WHEEL Safety Flanges
*The Ford-Smith Machine Co., Ltd., Hamilton.

ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMELED KITCHENWARE:
*The Davidson Mfg. Co., Ltd., Montreal.

ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.

ENGINES
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Sheldons, Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.

ENGINES, gas and gasoline
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline tractor plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Limited, Montreal.

ENGINES, hoisting
*M. Beatty & Sons, Welland.
*Waterous Engine Works Co., Ltd., Brantford.

ENGINES, marine gasoline
*Canadian Fairbanks-Morse Co., Limited, Montreal.

ENGINES, steam plowing and threshing
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.
Rolph & Clark, Ltd., Toronto.
Stone, Limited, Toronto.

*For Display Advertisement, See Index, Page 107

THE WORLD'S SHIPPING.

The following table, published by the New York *Analyist*, shows the total shipping of the world. That of Germany and Austria has disappeared from the seas.

	Sailing Vessels. Net Tons.	Steam Vessels. Net Tons.	Total No. Vessels.
Great Britain	935,000	10,786,000	11,539
Germany	427,000	2,853,000	2,551
United States	1,215,000	1,482,000	4,096
Norway	601,000	1,109,000	2,127
France	434,000	1,014,000	1,569
Japan	167,000	935,000	2,111
Italy	279,000	786,000	1,471
Holland	48,000	783,000	870
Russia	560,000	543,000	4,034
Sweden	162,000	641,000	2,057
Austria-Hungary	12,000	616,000	472
Spain	31,000	510,000	687
Greece	143,000	449,000	1,150
Denmark	79,000	429,000	1,085
Belgium	12,000	203,000	148
Various countries	525,000	684,000	3,092
Totals	5,630,000	23,841,000	39,059

HALTING GERMANY'S INDUSTRIAL MACHINE.

(From the Monetary Times.)

Military and naval Germany in its insane war lust is paralyzing industrial Germany. At the conclusion of hostilities, the nation's industry and commerce will have suffered a blow, from which it will take at least a quarter, perhaps a half century, maybe more, to recover. Modern Germany presents two outstanding facts, the great increase of the population since 1871 and the growing dependence of the population upon industrial and mercantile pursuits. Industry and trade in Germany maintain directly a population of about 34¾ millions, or more than half the entire population of the German Empire.

Chief among the causes which have helped to place Germany into the front rank of industrial nations is its possession of valuable mineral wealth and of capital to develop it. It has the largest known reserves of coal of all European countries. Upon that foundation, its iron and steel industries have been built rapidly and efficiently. It has copper, lead, zinc and other minerals in fair quantity and great wealth in its salt mines. It has practically a monopoly of potash, and supplies the world with that product.

The industrial hub of the country is the district which stretches from Dusseldorf on the Rhine land to Hamm in Westphalia, and covers a large part of those provinces. Speaking of that district, the *Cologne Gazette* prophesied some time ago that before long the district between Duisburg and Hamm would form "one enormous settlement, a single expanse of houses from 45 to 50 miles long and from 15 to 20 miles broad."

While Germany is still lagging behind in shipbuilding—the Clyde yards alone turning out a larger tonnage than all the German yards together—good progress is being made nevertheless. That is in some measure due to the naval policy of Emperor William, which would have been well if confined to peaceful work, but directed partly to the building of a gigantic navy, it likely will prove disastrous in the comparatively near future.

Year by year, Germany has become more independent of other countries in industrial products. Comparing the statistics of 1897 with those of 1911, the value of Germany's imports increased in that period by 49 per cent. and that of the exports by 129 per cent., while the increase of population was 23 per cent. Although the country is still largely agricultural, it is no longer able to feed its population. About one-half of the agricultural land is divided into relatively small holdings, while one-quarter is held by large proprietors.

The railways have been State-owned for a generation. Four years ago the country had about 18 miles of railway to every hundred square miles of surface, a ratio exceeded in Europe only by Belgium, Holland, the United Kingdom and Switzerland, in the order named. In his striking picture of the growth of industrial Germany, Mr. W. H. Dawson, in a notable volume on the subject, states that the railway system of that country and the development of its natural and artificial waterways have helped to build up industry and commerce and economic efficiency each to an equal degree.

Another powerful factor in the industrial life of Germany has been the concentration of capital. For instance, ten industrial concerns and nine financial institutions have aggregate capital of $638,750,000, an average of over $33,000,000. Nearly all these large undertakings, including the Krupp gun and shipbuilding firm, with capital of $45,000,000, and the Deutsche and Dresdner Banks, each with $50,000,000 capital, have grown to their present size as a rule by amalgamation with rival enterprises. The firm of Krupp, in which Emperor William has a substantial financial interest, employs 70,000 persons. Now industrial Germany and its 35,000,000 workers, with the other half of that Empire's population, is thrown into war by Germany's military madmen.

MAKING TOYS IN CANADA.

A Factory With 110 Employees in Toronto.

Regarding the possibility of a scarcity in Christmas toys, it is pointed out by the Dominion Toy Manufacturing Co., of Toronto, that there is already a considerable percentage of these goods made in Canada. This firm, according to their statement, employs one hundred and ten people the year around. "And we do not intend to advance our prices," says the company. Other Canadian firms which manufacture toys are Gendrow Mfg. Co., Ltd., Toronto; Canada Spool and Bobbin Co., Ltd., Walkerville; and Taylor, Scott & Co., Ltd., Palmerston.

BENEFIT FOR UNITED STATES.

Sir George Paish, writing on July 31, says:

"A great war in Europe will probably bring economic advantages to the United States. It will enable it to sell its great crops in places which will give a much greater income than if there was no war.

"Almost every industry will derive more or less advantage. American investors and bankers should get in much profit from the ability to buy back from Europe great quantities of securities at attractive prices in payment for their food stuffs and raw material exported from the United States.

To a great extent the above is true of Canada, where conditions are very similar to those in the States.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS AND CATALOGUE BUILDERS
The Esdale Press, Ltd., Edmonton, Alta.

ENGRAVERS AND PRINTERS, banknote
American Bank Note Co., Ottawa, Ont.

ENGRAVING:
*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.

ENVELOPES
Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

ESCUTCHEON PINS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR
Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS
Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto.

EXPLOSIVES, high
Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.
J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

FASTENERS, belt
Sadler & Haworth, Montreal, Que.

FENCES and GATES:
*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire
Banwell Hoxie Wire Fence Co., Hamilton, Ont.

FENCES, iron
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

FENCING, wire
The Great West Wire Fence Co., Ltd., Winnipeg, Man.
C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:
*The E. B. Eddy Co., Ltd., Hull.

FILES
Henry Disston & Sons, Ltd., Toronto.
*The Nicholson File Co., Port Hope, Ont.

FIRE ALARM APPARATUS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE DOOR HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:
*Waterous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:
*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS
*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.
*The General Fire Equipment Co. Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford.

FIRE HOSE
*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.
Dunlop Tire and Rubber Goods Co., Limited, Toronto.
*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.
*Canadian H. W. Johns-Manville Co., Toronto.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Rockwood Sprinkler Co., of Canada, Ltd., Montreal, Que.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FIREPROOF WINDOWS and DOORS:
*A. B. Ormsby, Ltd., Toronto.
*Geo. W. Reed & Co., Montreal.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King, Ltd., Montreal, Que.

FLAGS
J. J. Turner & Sons, Peterboro, Ont.
*Smart-Woods, Ltd., Montreal.

FLASHLIGHTS
Canadian Carbon Co., Toronto.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLOUR
Leitch Bros. Flour Mills, Ltd., Oak Lake, Man.

FLOUR MILL MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.

FLUE LINERS
Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
*Sheldons, Ltd., Galt.

FORGINGS
Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton.

FOUNDRY EPUIPMENT
The Northern Crane Works, Ltd., Walkerville.
*The Ford-Smith Machine Co., Ltd., Hamilton.

FOUNTAIN FRUITS and Juices
J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:
*Dodge Mfg. Co., Ltd., Toronto.

FRICTION HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

FRINGES AND TASSELS
The Moulton Mfg Co., 236 Craig St. E., Montreal.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal. Que.

FUR TRIMMINGS, ornaments and buttons
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air
Bedford Stove Co., Bedford, Que.

FURNITURE, hall
The George McLagan Furniture Co,. Ltd., Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:
*A. C. Leslie & Co., Montreal.

GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
*The Waterous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground
S. F. Bowser & Co., Toronto.

GASOLINE
*The Imperial Oil Co., Ltd., Toronto.

GAS PRODUCERS:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

GENERATORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.
*International Engineering Works, Ltd., Amherst, N.S.

GENERATORS, electric
*Canadian General Electric Co., Ltd., Toronto.

GINS
The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd.
Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS
A. R. Clarke & Co., Ltd., Toronto.

GLUE
Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.

GRATES.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*International Engineering Works, Ltd., Amherst; N.S.

GRAVITY CARRIERS
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Dennis Wire & Iron Works Co. London.

GRINDERS, Pedestal and Bench.
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDING and Polishing Machinery
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDING WHEELS:
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.

GYPSUM, crushed
*Albert Mfg. Co., Hillsborough, N.B.

GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HACK SAW FEEDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS TO DETAIL
Wilson Bros., Ltd., Collingwood, Ont.

HARNESS
Lamontagne Ltd., Montreal, Que.

HATS, men's straw
The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope
The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:
*The Goldie & McCullough Co., Ltd., Galt.

HEATING APPLIANCES:
*Sheldons, Ltd., Galt.

HEATING SYSTEMS
Gurney Foundry Co., Ltd., Toronto.

HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

HINGES:
*The Steel Co. of Canada, Ltd., Hamilton.

HOISTS
*Northern Crane Works, Ltd., Walkerville, Ont.

HOISTS, electric and pneumatic.
The Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.

HOISTING MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.

HOSE, fire
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.
*Canadian Consolidated Rubber Co,. Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

HOTEL FIXTURES
Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.

HUMIDIFIERS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES
Bawden Machine Co., Ltd., Toronto.

*For Display Advertisement See Index, Page 107

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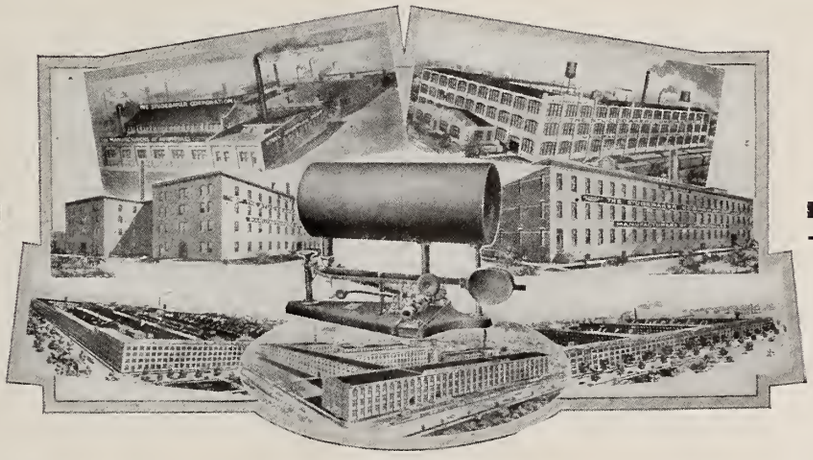
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Canadian Morehead Mfg. Co., Woodstock, Ont.

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ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

ILLUMINATED SIGNS
Geo. Booth & Son, Toronto.

INCUBATORS & BROODERS
Lee Mfg. Co., Ltd., Pembroke, Ont.

INJECTORS, automatic and autopositive
Penberthy Injector Co, Ltd., Windsor, Ont.

INSULATED WIRE
*Canadian General Electric Co., Ltd., Toronto.

INSULATION, patent seamless cork
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS
Standard Clay Products, Ltd., St. Johns, Que.

IRON:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar
Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.
*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:
*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY
A. R. Whittall, Montreal.

JAM, canned goods, etc.
E. D. Smith & Son, Limited.

JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.

JOINTERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

JELLY POWDER
S. H. Ewing & Sons, Montreal. Que.

JEWELRY, enamelled souvenir
Caron Bros., Montreal, Que.

JEWELRY, gold filled
Caron Bros., Montreal, Que.

KELSEY WARM AIR GENERATOR
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:
*Sheldons. Ltd., Galt.

KINDLING
Standard Fuel Co., Toronto.

KNIFE GRINDERS:
*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:
*Penman's, Ltd., Paris, Ont.

KNIVES
*E. C. Atkins & Co., Hamilton.
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.

KRAFT, brown paper:
*The New Brunswick Pulp & Paper Mfg. Co., Ltd., Millerton, N.B.

LABELS
Lawson & Jones Ltd., London, Ont.

LABELS, lithographed
Harris Lithographing Co., Toronto.

LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
Sadler & Haworth, Montreal, Que.

LACE, leather:
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LAGER
E. L. Drewry, Winnipeg, Man.

LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:
Canadian Billings & Spencer Ltd., Welland.

LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.

LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD
* The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto.

LEAD PIPE
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER
The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole
The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather
A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.
Clarke & Clarke, Limited, Toronto.

LEATHER, upper
A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED TIN WARE:
*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Company, Ottawa, Ont.
Hough Lithographing Co., Ltd., Toronto.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited, Toronto.
Rolph & Clark, Ltd., Toronto.

LOCKERS:
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, decking and planking
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).

LUMBER, Douglas fir (Oregon pine)
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, long timbers and spars
Canadian Western Lumber Co. Ltd., Fraser Mills, B.C.

LUMBER, pickets and lath
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, staves and heading
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, white pine
Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

MACHINERY, conveying.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
The Northern Crane Works, Ltd., Walkerville.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

MACHINERY, elevating.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
*Wm. & J. G. Greey, Toronto.

MACHINERY, elevating and conveying:
*Wm. & J. G. Greey, Toronto.

MACHINERY, flour mill:
*The Goldie & McCullough Co., Ltd., Galt.
*Wm. & J. G. Greey, Toronto.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY GUARDS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MACHINERY, hoisting, etc.
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, pumping
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, sawmill
*Canada Machinery Corporation, Ltd., Galt, Ont.
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene, Ont.
W. P. Plant, Hastings, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, special
Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery
W. P. Plant, Hastings, Ont.

MACHINERY, transmission
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

MACHINERY, wood working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Berlin Machine Works, Ltd., Hamilton.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:
*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting
Spramotor Co., London, Ont.

*For Display Advertisement See Index Page 107

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Canadian Carbonate Co., Ltd., Montreal, Que.

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*Dominion Paper Box Co., Ltd., Toronto.

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*Hiram Walker & Sons, Ltd., Walkerville.

MANTELS, wood
W. A. Moore Co., Ltd., Meaford Ont.

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The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

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The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MATCHES:
*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned
The Wm. Davies Co., Ltd., Toronto.

MECHANICAL DRAUGHT
*Canadian Sirocco Co., Windsor, Ont.

MEDICINES, patented and pharmaceutical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
Alonzo W. Spooner, Limited, Port Hope, Ont.

METAL CEILING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*A. B. Ormsby, Ltd., Toronto.

METAL, spinning and stamping
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SASH:
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville.

METAL SHINGLES:
*Metal Shingle & Siding Co., Ltd., Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

METAL SIDING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*A. B. Ormsby, Ltd., Toronto.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLERS
Leitch Bros. Flour Mills, Ltd., Oak Lake, Man.

MILLING CUTTERS
Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)
Holt, Renfrew Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)
Holt, Renfrew, Ltd., Quebec, Que.

MONUMENTS
McIntosh Granite Co., Ltd., Toronto.

MORTISERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MOTOR CAR PARTS AND ACCESSORIES
*Russell Motor Car Co., Ltd., Toronto.

MOTOR-DRIVEN GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MOTORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.

MOTORS, D.C.
*Canadian Crocker Wheeler Co., St. Catharines, Ont.

MOTORS, electric (alternating current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Gramm Motor Truck Co., Ltd., Walkerville.

MOULDERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

NAILS:
*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAME PLATES
Patterson and Heward, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto.

NITROGEN
*L'Air Liquide Society, Montreal, Que.

NUTS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.
*Wm. & J. G. Greey, Toronto.

OFFICE STATIONERY:
*The Montreal Lithographing Co., Ltd., Montreal.

OILS
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS
S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES
Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring
S. F. Bowser & Co., Toronto.

OIL COMPANIES
Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)
*British American Oil Co., Ltd., Toronto.

OILS, Petroleum
*The Imperial Oil Co., Ltd., Toronto.

OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

ORGANS
*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.
W. Doherty Piano & Organ Co., Ltd., Clinton.

ORGANS, pipe
Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour
Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

ORNAMENTS (dress, fur, cloak, etc)
The Moulton Manufacturing Co., Limited, Montreal.

OSTRICH PLUMES
R. Parker & Co., Toronto.

OVENS, portable bake
Bedford Stove Co., Bedford, Que.
*Wm. & J. G. Greey, Toronto.

OVERALLS
Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS
Rosamond Woollen Co., Aimonte, Ont.

OVERHEAD RUNWAYS.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont

OXYGEN
*L'Air Liquide Society, Montreal, Que.

PACKING BOXES
Barchard & Co., Ltd., Toronto.

PACKING, engine:
Garlock Packing Co., Hamilton.

PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.

PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Brandram-Henderson, Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge
Standard Paint and Varnish Co., Ltd., Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island, Que.

PAPER, book
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, cover
Barber Paper & Coating Mills Ltd Georgetown, Ont.

PAPER, envelope
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building
*The Riordon Pulp and Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, carbon
*Peerless Carbon and Ribbon Mfg. Co., Ltd., Toronto.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, coated box board
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, enamelled blotting
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, genuine Canadian kraft, glazed and unglazed
*The New Brunswick Pulp and Paper Co., Ltd., Millerton, N.B.

PAPER, label
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, ledger
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, wall
Stauntons, Ltd., Toronto.

PAPER, writing
The Toronto Paper Mfg Co., Cornwall, Ont.

PAPER, writing, high-grade
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER BOXES:
*Dominion Paper Box Co., Toronto.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

*For Display Advertisement See Index, Page 107

SAVE TIME,

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SAVE MONEY.

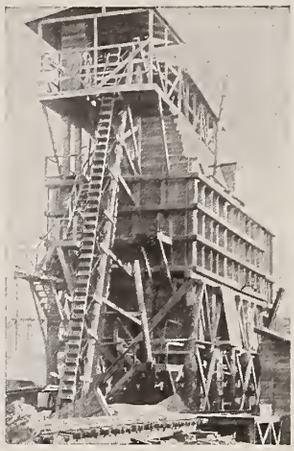
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Agents—H. E. Plant, 1790 St. James St., Montreal; H. W. Petrie, Limited, Toronto, Ont.; Robert Hamilton & Co., Vancouver, B.C.; E. Leonard & Sons, St. John, N.B.; A. R. Williams Mach. Co., Winnipeg, Man.

PASSEMENTERIE WORK
The Moulton Mfg. Co., 236 Craig St. E., Montreal.

PATENTS
Fetherstonhaugh & Co., Toronto.
Ridout and Maybee, Toronto.

PATENT LITIGATION
Ridout and Maybee, Toronto.

PEAS AND BEANS FOR SEED
W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:
*Canada Wire & Iron Goods Co., Hamilton.
*Wm. & J. G. Greey, Toronto.

PERFORATED MUSIC ROLLS
The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS
Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.
*Gourlay, Winter and Leeming, Toronto.
W. Doherty Piano and Organ Co., Ltd., Clinton.

PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.

PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

PIANOS, player
*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions
The Otto Higel Co., Ltd, Toronto.

PIANO STOOLS and BENCHES
*Goderich Organ Co., Goderich, Ont.

PICKLES
The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS
T. A. Lytle Co., Ltd., Toronto.

PIG IRON:
*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS, ETC.
Wilson Bros., Ltd., Collingwood. Ont.

PINS, society, emblems and Badges
Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:
*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

PIPES, culvert
Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer
Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings
Warden King Ltd., Montreal, Que.

PIPES AND TUBES, wrought merchant
*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off Machines
John H. Hall & Sons, Limited. Brantford, Ont.

PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:
*Berlin Machine Works, Ltd Hamilton.
*Canada Machinery Corporation Galt.

PLANING MILLS
G. & J. Esplen, Montreal, Que.

PLASTER, fireproofing
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER OF PARIS
*Albert Mfg. Co., Hillsborough, N.B.
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER, hard wall
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land
*Albert Mfg. Co., Hillsborough, N.B.

PLAYER PIANOS
W. Doherty Piano & Organ Co., Ltd., Clinton.

PLAYING CARDS:
*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS
J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:
Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES
Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain
Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar
Fernie Lumber Co., Ltd., Fernie. B.C.

POLISHING MACHINES
*The Ford-Smith Machine Co., Ltd., Hamilton.

PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence
Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS
Stone, Limited, Toronto.
Hough Lithographing Co., Ltd., Toronto.

POULTRY REGULATORS
Pratt Food Co. of Canada, Ltd., Toronto.

POULTRY SUPPLIES AND MEDICINES
Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

POWER SWITCHBOARDS
*Northern Electric Co., Ltd., Montreal, Que.

PRESSES AND DIES
Brown Boggs Co., Ltd., Hamilton, Ont.

PRESSES, baling
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic
William R. Perrin & Co., Ltd., Toronto.
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer
William R. Perrin & Co., Ltd., Toronto.

PRESS POWER:
*Canada Machinery Corporation, Galt.

PRINTERS
Rous & Mann, Ltd., Toronto.
R. G. McLean, Toronto.

PRINTERS, catalogue:
R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.

PRODUCE
The Wm. Davies Co., Ltd., Toronto.

PROPRIETARY MEDICINES
Northrop & Lyman Co., Ltd., Toronto.

PROVISIONS
The Wm. Davies Co., Ltd., Toronto.

PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

PULP, Bleached Sulphite
The Edward Partington Pulp and Paper Co., St. John, N.B.

PUMPS.
*Canadian Allis-Chalmers, Limited, Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
Spramotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

PUMPS, boiler feed.
*Canadian Allis-Chalmers, Limited, Toronto.
*The Goldie & McCullough Co., Ltd., Galt.

PUMPS, centrifugal
*M. Beatty & Sons, Ltd., Welland. Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, iron
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS (Turbine and reciprocating)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

PUMPS, turbines
*Canadian Allis-Chalmers, Ltd., Toronto.

PYJAMAS AND NIGHT ROBES
Williams, Greene & Rome, Berlin, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron:
*Dennis Wire & Iron Works Co., London.

RAILINGS, bronze
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada, Ltd., Montreal, Que.

RAILWAY SUPPLIES.
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal. Que.

RAILWAY TARIFF BINDERS
The Esdale Press Ltd., Ottawa, Ont.

READY-TO-WEAR GARMENTS, Ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
Pratt and Whitney Co. of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.
*Butterfield & Co., Rock Island, P.Q.

"REDWOOD" lager
E. L. Drewry, Winnipeg, Man.

REED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock, Ont.

REFRIGERATORS
Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT for concrete:
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville.

REMEDIES, Veterinary
Pratt Food Co. of Canada, Ltd., Toronto.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETS:
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

RIVETS, bifurcated and tubular
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ROLLERS, shade
Daly & Morin, Montreal, Que.

ROOFING, metal
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.

ROOFING, ready to lay
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
Dominion Bridge Co., Ltd., Montreal.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.
The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.

RUBBER GOODS.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*The Goodyear Tire & Rubber Co., Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
of Canada, Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

RUBBER HOSE.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*The Goodyear Tire & Rubber Co., of Canada, Ltd., Toronto.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto.

RUBBER SPECIALTIES
Dunlop Tire & Rubber Goods Co. Ltd., Toronto.
*The Goodyear Tire & Rubber Co., of Canada, Ltd., Toronto.

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

RYE
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SAILS AND WATERPROOF COVERS, etc.
J. J. Turner & Sons, Peterboro, Ont.

SAMPLE CASES
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.

SANDERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SANDPAPER
Delany and Pettit, Ltd., Toronto, Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
Canadian Salt Co., Ltd., Windsor Ont.

SANITARY PAPER TOWELS:
*E. B. Eddy Co., Ltd., Hull.

SAWS
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt. Ont.

SAWS, band:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SAWS, circular mill:
*E. C. Atkins & Co., Hamilton.

*For Display Advertisement See Index, Page 107



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SAWS, crosscut:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SAWS, crosscut and band
*E. C. Atkins & Co., Hamilton.
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack:
*E. C. Atkins & Co., Hamilton.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

SCALES
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, for weighing
C. Wilson & Son, Toronto.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCREENS:
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.
*Wm. & J. G. Greey, Toronto.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.

SCREWS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SHAFTING.
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

SHANTY BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SHEAR BLADES, iron
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING, asbestos corrugated:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHEET METAL WARE (iron galvanized and enamelled)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.

SHELLAC
*Berry Bros., Ltd., Winnipeg.

SHINGLES, asbestos cement:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHIRTS
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
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*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

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SILVERWARE
Toronto Silver Plate Co., Ltd., Toronto.
Standard Silver Co., Toronto.

SILVERWARE, sterling
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SINKS, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

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SKATES, hockey
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*The Canada Metal Co., Toronto.

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*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

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*Hiram Walker & Sons, Ltd., Walkerville, Ont.

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*For Display Advertisement See Index, Page 107



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*Canadian General Electric Co., Ltd., Toronto.

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*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

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*International Engineering Works, Ltd., Amherst, N.S.

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*United Typewriter Co., Toronto.

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*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

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*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

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*For Display Advertisement See Index Page 107

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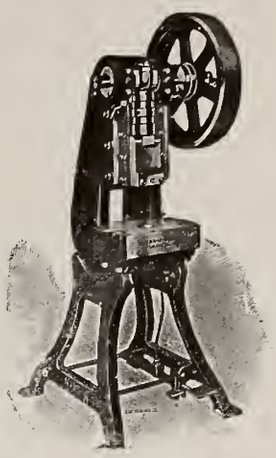
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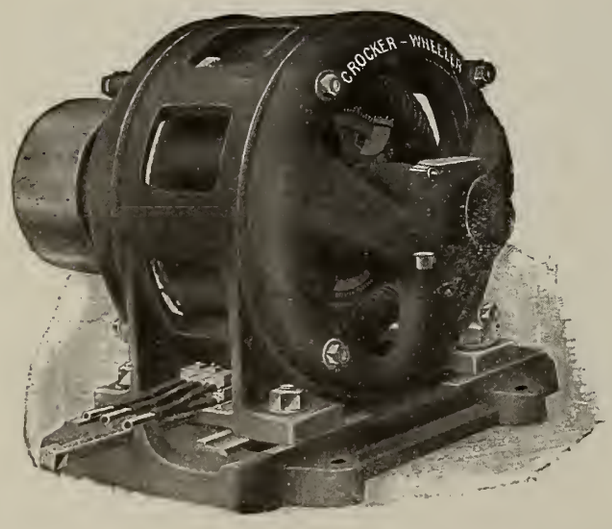
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THE DESIGN OF

CROCKER-WHEELER INDUCTION MOTORS

INCLUDES:

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features; Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works: St. Catharines District Offices: Montreal, Toronto, Vancouver

Britain's Motto:
"BUSINESS AS USUAL"

London, September 7.—Nearly all of Britain's newspapers contain the lines: Britain's Motto—"BUSINESS AS USUAL."

A meeting of representative business and advertising men has been held, at which Mr. H. Gordon Selfridge presided.

Mr. Selfridge said they were there to urge that business should be continued as usual, and that the great motive power—advertising—should be kept at normal or above normal pressure.

It was the duty of those who were obliged to stay at home to carry on their work with the same courage, energy and unselfishness that they expected, and would surely see displayed by those brave men who had gone to the front, (Cheers.)

War required two forces; one of the men who fought with risk of life against the enemy, and another to keep the lifeblood of the nation moving to carry on the work of making and providing.

To the one force was the glory and the reward when successful; to the other the less exciting, less glorious, but necessary duty to the nation, and war demanded sacrifices from both.

The object of the meeting was to express a hope that the force to which they belonged would do its duty, so that when the war was over and peace signed in Berlin—(cheers)—they might feel that they had not been found wanting in the time of trial.

No action of theirs could more encourage our sailors and soldiers and more discourage their enemies than the maintenance of an "even keel" in our trade and industry.

Let them prove that they did not only carry on business for profit, but also to provide for the wants of the people.

To withdraw publicity from their businesses at such a time would be like slackening fires in a vessel when steam was most needed. (Hear, Hear.)

Mr. Thomas Russell said: Our ships kept the seas free, and German commerce was swept away. (Cheers.)

For years we had grumbled at German competition, and now w s the time to get back what we had lost to Germany.

"Advertise," he continued, "and let the world know that what Germany can make we can make.

"If we use the opportunity the trade will not return to Germany, and there will be an end to the trade which has made 'Made in Germany' a by-word for substitutes."

With recognition of our present opportunity there would be a rich reward after the war.

There should be no holding up of payments by which manufacturers would be hampered.

To keep factories at full time was a national proposition.

The end of the war would be brought about as much by shrinkage of trade as by victories of our Army or the weight of our Fleets.

We have the facilities for popularizing "Made in Canada" products from Coast to Coast.

The Canadian Street Car Advertising Co., Limited

MONTREAL TORONTO WINNIPEG

COTTON & WOOL WASTE

Made in Canada by

The Dominion Waste Mfg. Co. Limited, Toronto

BRANDS:

Cotton Polishing: Cream, White.

White Cotton Wiping: XXX Extra, X Grand, XLCR, X Empire, X Press.

Colored Cotton Wiping: Fancy, Lion, Standard, Popular, Keen.

Wool Packing: Arrow, Axle, Anvil, Anchor.

Washed Cotton Wipers: Select White, Light Colored, Dark Colored.

Packed in Compressed Bales
500, 200, 100, 50, 25, 10, 5 lbs.

No liquid dope or clay used in any of our brands—nothing but threads.

WASHED COTTON WIPERS

SOLE SELLING AGENTS

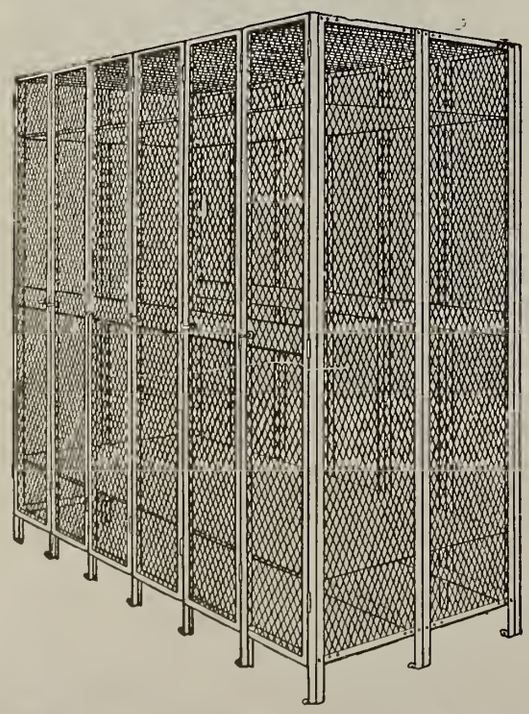
Scythes & Company Limited

Manufacturers and Jobbers

TORONTO
MONTREAL

Also headquarters for Cordage, Twines, Cotton Duck Oiled Clothing, Etc.

That Locker Question



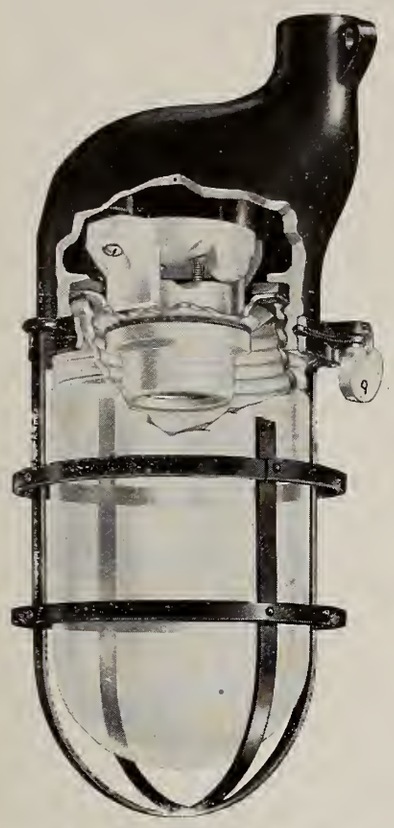
MR. MANUFACTURER

That's the Question

We will help you to a decision
IT IS WAR TIME YOU KNOW
We want Your Orders
BE PATRIOTIC IN FACT
As well as in sentiment

TRADE IN CANADA

The Geo. B. Meadows Toronto Wire, Iron and Brass Works Co., Limited, TORONTO



Broken-away View showing interior.

CONDULETS
OF
V and VH Series
VAPOR, GAS AND DUST-PROOF

For marine work and in breweries, refineries, flour mills or wherever there is dampness, gas or fine dust.

These Condulets remain vapor, gas and dust-proof even though globes be broken or removed for lamp renewals.

Illustrations below show a few of the many forms in which these series of Condulets are made.

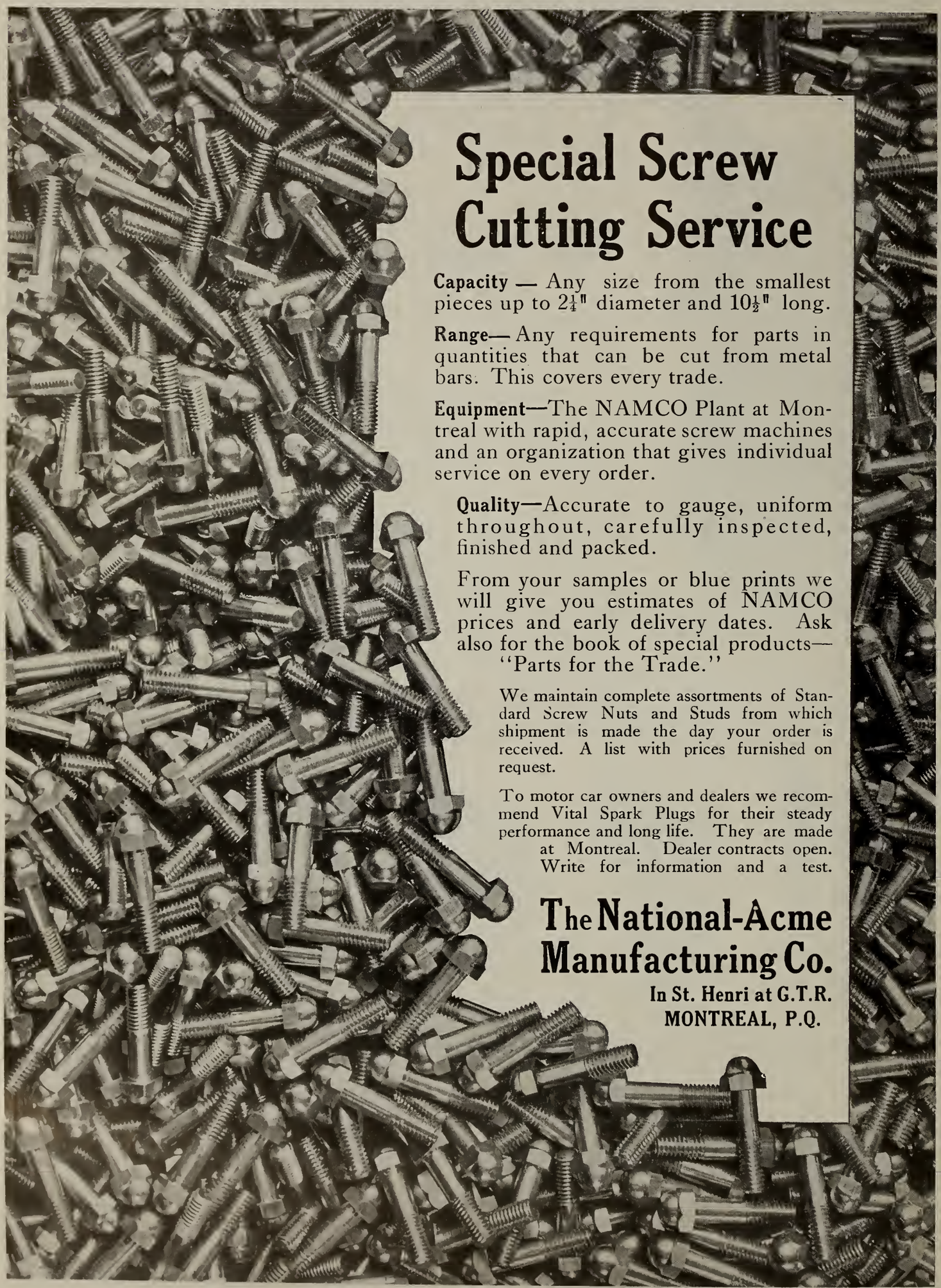


ORDER FROM YOUR JOBBER. IF HE DOES NOT STOCK THEM, WRITE US.

Complete and Fully Illustrated Catalog Free upon Application

CROUSE-HINDS CO. OF CANADA, LIMITED

Main Office and Works:
TORONTO, ONTARIO, CANADA



Special Screw Cutting Service

Capacity — Any size from the smallest pieces up to 2¼" diameter and 10½" long.

Range— Any requirements for parts in quantities that can be cut from metal bars. This covers every trade.

Equipment—The NAMCO Plant at Montreal with rapid, accurate screw machines and an organization that gives individual service on every order.

Quality—Accurate to gauge, uniform throughout, carefully inspected, finished and packed.

From your samples or blue prints we will give you estimates of NAMCO prices and early delivery dates. Ask also for the book of special products—"Parts for the Trade."

We maintain complete assortments of Standard Screw Nuts and Studs from which shipment is made the day your order is received. A list with prices furnished on request.

To motor car owners and dealers we recommend Vital Spark Plugs for their steady performance and long life. They are made at Montreal. Dealer contracts open. Write for information and a test.

The National-Acme Manufacturing Co.

In St. Henri at G.T.R.
MONTREAL, P.Q.

ASBESTOS

WE CARRY THE LARGEST COMPLETE STOCK IN CANADA

ASBESTOS SHINGLES
ASBESTOS LUMBER
ASBESTOS MILLBOARD
ASBESTOS PAPER
ASBESTOS PACKING
ASBESTOS ROOFING
ASBESTOS PIPE COVERING
ASBESTOS CEMENT
ASBESTOS CURTAINS

CANASCO RUBBER ROOFING 1, 2 AND 3 PLY
COTTON WASTE, WHITE AND COLORED, AND WOOL WASTE
OAKUM, PLUMBERS AND NAVY
BEAVER BOARD
RAILWAY AND ENGINEERS' SUPPLIES

WE EMPLOY A LARGE STAFF OF EXPERIENCED WORKMEN AND UNDERTAKE THE COVERING OF STEAM PLANTS AND COLD STORAGE ANYWHERE IN CANADA.

CANADIAN ASBESTOS COMPANY

42 TO 48 YOUVILLE SQUARE — MONTREAL — MAIN 332 AND 611



THE
WILT TWIST DRILL

The Drill that is cut from **special steel**---steel that is designed to be made into drills.

The Drill that is **machined automatically,** completed by successive cuts at the one chucking.

The Drill that is **hardened scientifically** by expert men with electrical equipment.

The drill that is **giving better results** to the largest drill users of Canada.

THE WILT TWIST DRILL CO. OF CANADA LIMITED

WALKERVILLE - - ONTARIO



Efficiency in *Your* Varnish Shop

Whether you use Varnish in a small way or in a large way—

Whether your varnish shop is a part of a large manufacturing plant, just a small shop or a store catering to the architectural trade—

You cannot afford to overlook the efficiency of that shop.

You should ***know*** whether or not you are getting the maximum ***quality*** production for the money expended—and whether you are giving your customers the quickest service possible consistent with good, high-grade workmanship.

ASK THE BERRY BROTHERS' SALESMEN

Ask the next Berry Brothers' representative that calls on you to look over your plant—ask him for suggestions. He is a varnish expert and has at his command a great fund of knowledge on Varnish shop efficiency.

For over 56 years Berry Brothers have been making quality varnishes for every known varnish need—varnishes that give the utmost in satisfactory varnish service. During that time they have studied Varnish shop efficiency from every angle.

You can apply this vast fund of information to your business by merely asking the Berry Brothers' salesmen that call on you or by writing direct.

Any manufacturer or varnish user that uses varnish in quantities large enough to buy direct is invited to avail himself of this and all other branches of Berry Brothers' service. Write us direct for any varnish information you may desire.

BERRY BROTHERS (INCORPORATED)
World's Largest Varnish Makers

Established 1858 — Walkerville, Ont.

What about your Printing?

IF it worries you—why not shift the worry to us? We have a *worry department*—that will write copy—prepare designs—make cuts and show you the whole thing in a finished form—for your approval.

This service covers every piece of printing you may desire—catalogues—calendars—display hangers—booklets and such.

Are your Tags satisfactory?

WE'RE Tag headquarters for Canada. It's Tag Day—all the time with us—and—if your present tags are not just as you think they ought to be—send to us for samples.

Seven grades to choose from—suitable for every possible shipping or shop demand.

Factory Tags—Work Tags—String Tags and Gummed Labels are our specialties.

Southam Press Limited

Montreal · Toronto

Economical Efficiency

Combining strength, security, sanitation and good appearance and encouraging system and tidiness at a proven saving in dollars and cents over less modern methods, the equipment here shown should be installed wherever there is a desire for economical efficiency.



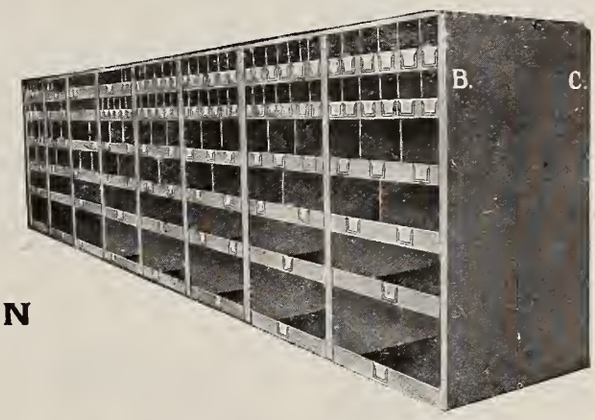
Style D35

DENNISTEEL
(LONDON, CANADA)
UNIT-CONSTRUCTION

LOCKERS AND SHELVING

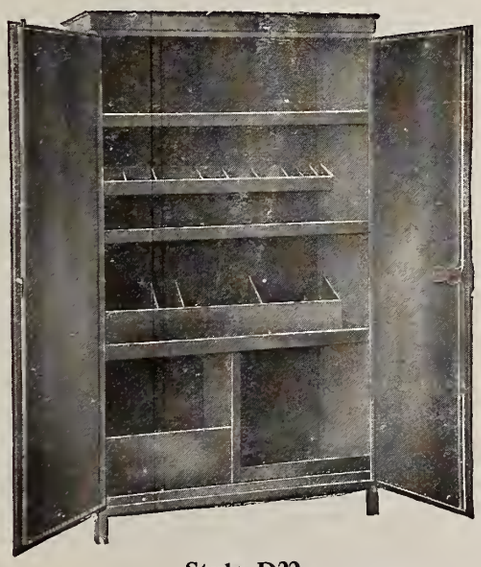
Only a few examples of many styles are shown and we are always glad to design special equipment. All styles are made of sheet steel and where necessary angle iron frames; all are built on unit system allowing of expansion or alteration; all doors have a patented three-way locking device; all can be finished as desired, although thoroughly baked on enamel is usual.

In practically all cases the shelving will save its cost in a year or two through reduction of floor space necessary and the lockers will do the same through time saved for employer by employees having a definite, secure place for personal effects.

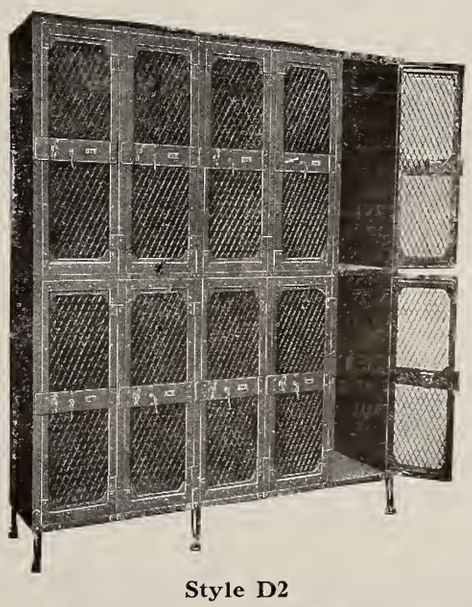


Style D31

THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON
CANADA



Style D22



Style D2

DENNIS WIRE & IRON WORKS CO. LTD., London, Canada: Please send me particulars regarding Nos. _____ shown above (if type wanted is not shown, state requirements on next line.)

Write name in margin. Write address in margin.

HOME BUYING

Let us submit prices on your requirements of

SPRINGS OF ALL KINDS, AXLES FOR WAGONS AND CARRIAGES, TRACK TOOLS, TRACK SUNDRIES, FORGINGS ETC.

We are prepared to figure at cost in the endeavor to keep the wheels of our factory turning this winter and employing as many of our hands as possible.

B. J. COGHLIN CO., LIMITED

Office and Works: Ontario, Davidson and Darling Streets, Montreal, P.Q.

NICHOLSON MADE

EFFICIENCY

We hear much to-day about "efficiency" in business.

In a nut-shell, "Efficiency" means the **most** work—**well** done—in the **least** time—at the **lowest** cost.

In your filing department this calls for the use of NICHOLSON-MADE-FILES.

A half-century's use—at a present rate of 50,000,000 each year—is positive proof that these famous files cut deepest—work fastest—last longest—and cost least to use.

And by using two NICHOLSON-MADE-FILES where you now use one, you can cut down your filing cost to the absolute minimum, while adding materially to both the quantity and quality of the work.

Make NICHOLSON BRANDS the File-Standard in your work. See that no file is used after it becomes half-worn. The economies you effect by this method reveal undreamed-of **extra** profits in your filing department.

BRANDS:

KEARNEY & FOOT GREAT WESTERN
AMERICAN ARCADE GLOBE

Nicholson File Co., Port Hope, Ont.

"FILE FILOSOPHY"—A 50 years' education on files in an hour, and our Catalogue sent FREE on request

N

Goold, Shapley & Muir Co.

LIMITED

BRANTFORD : WINNIPEG : REGINA : CALGARY

MANUFACTURERS OF

GAS AND GASOLINE ENGINES

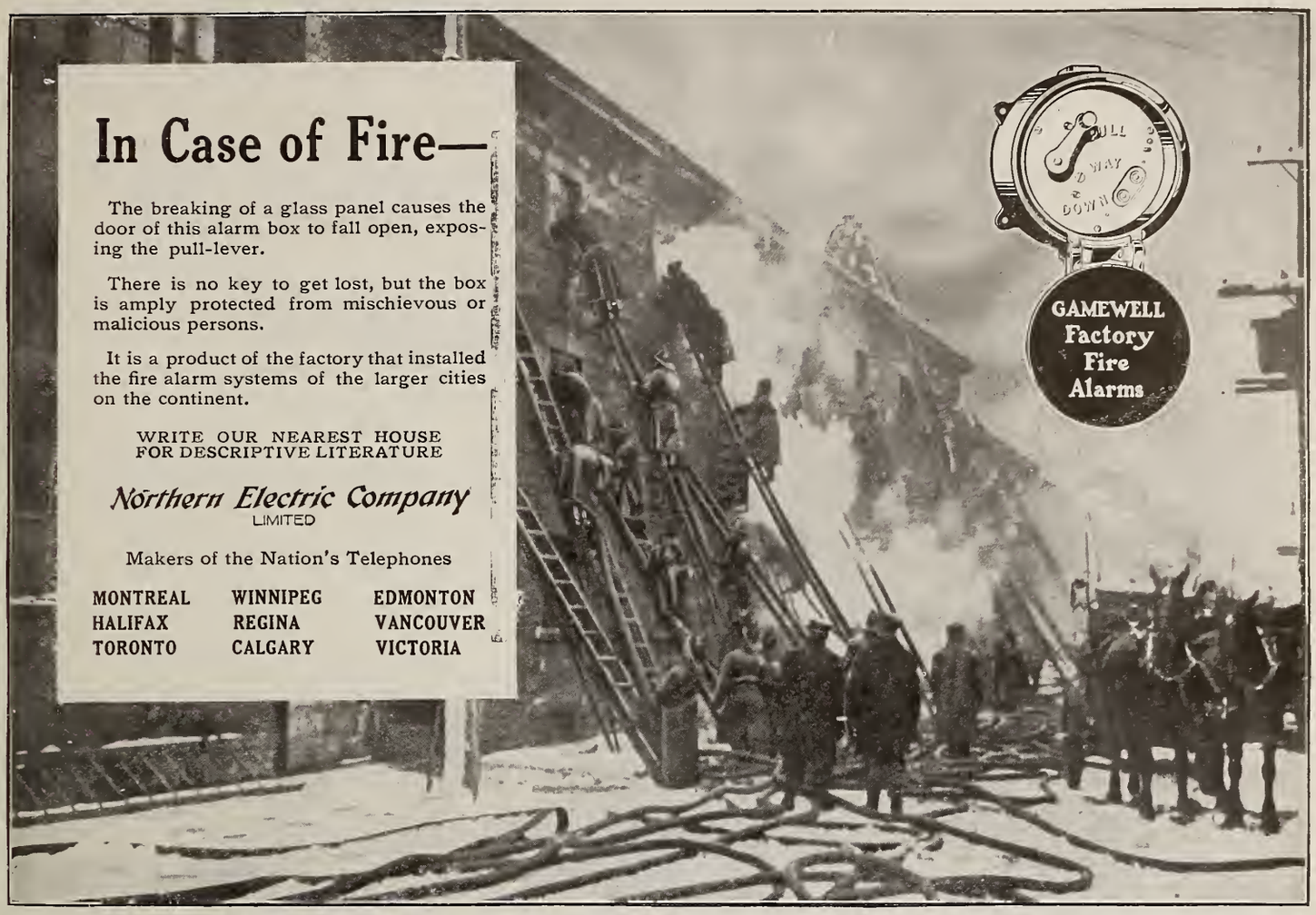


TANKS
AND
TOWERS
FOR
Sprinkler Systems

TOWN WATER SUPPLY
ETC., ETC

PUMPS
CONCRETE MIXERS
HOISTS, Etc.

Write, if interested



In Case of Fire—

The breaking of a glass panel causes the door of this alarm box to fall open, exposing the pull-lever.

There is no key to get lost, but the box is amply protected from mischievous or malicious persons.

It is a product of the factory that installed the fire alarm systems of the larger cities on the continent.

WRITE OUR NEAREST HOUSE
FOR DESCRIPTIVE LITERATURE

Northern Electric Company
LIMITED

Makers of the Nation's Telephones

MONTREAL	WINNIPEG	EDMONTON
HALIFAX	REGINA	VANCOUVER
TORONTO	CALGARY	VICTORIA

ESTABLISHED 1875

The Boiler Inspection and Insurance Co. of Canada

Continental Life Building, Toronto

Issues Policies of Insurance after A CAREFUL INSPECTION OF THE BOILERS Covering LOSS OR DAMAGE TO PROPERTY and LOSS RESULTING FROM LOSS OF LIFE AND PERSONAL INJURIES. :: :: :: ::

Policies Guaranteed by THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY. :: :: ::

Assets for Security of Policy-holders, $4,552,020.43. :: ::

JOHN L. BLAIKIE - - - President
H. N. ROBERTS - Vice-President and Sec'y
GEO. C. ROBB - - - Chief Engineer
A. E. EDKINS - - Ass't Chief Engineer

Polarine



Correct lubrication for your motor is as necessary as proper food for your body.

Don't wear out your motor by using the wrong oil.

Polarine assures freedom from breakdowns and easy motoring under all conditions of load and temperature.

The Imperial Oil Co.,
Limited

TORONTO WINNIPEG MONTREAL
ST. JOHN HALIFAX

The Best Defensive is an Ardent Attack

IN chess, in play, in war, and in business the best defensive is an ardent attack.

Leadership and success are not mere matters of position and resources. They are matters of spirit.

The spirit of leadership and success shows itself in aggressive action.

In Canada eventual leadership and success in manufacturing, wholesale and retail enterprise will belong to those who push forward now and always. Those who seek merely to conserve their position become stationary and expose themselves to the danger of ultimate destruction.

These are the lessons and facts of history.

The occupation of new fields of trade and the winning of new customers are achieved at the least cost of money and time by the adoption of a strong, constantly-maintained and prudent policy of advertising in the public press.

MAINTENANCE OF ATTACK WEARS DOWN RESISTANCE

CANADIAN METER CO., Limited

Manufacturers of

DRY METERS

for

ACETYLENE, COAL AND NATURAL GASES

Tobey Iron Natural Gas Meters

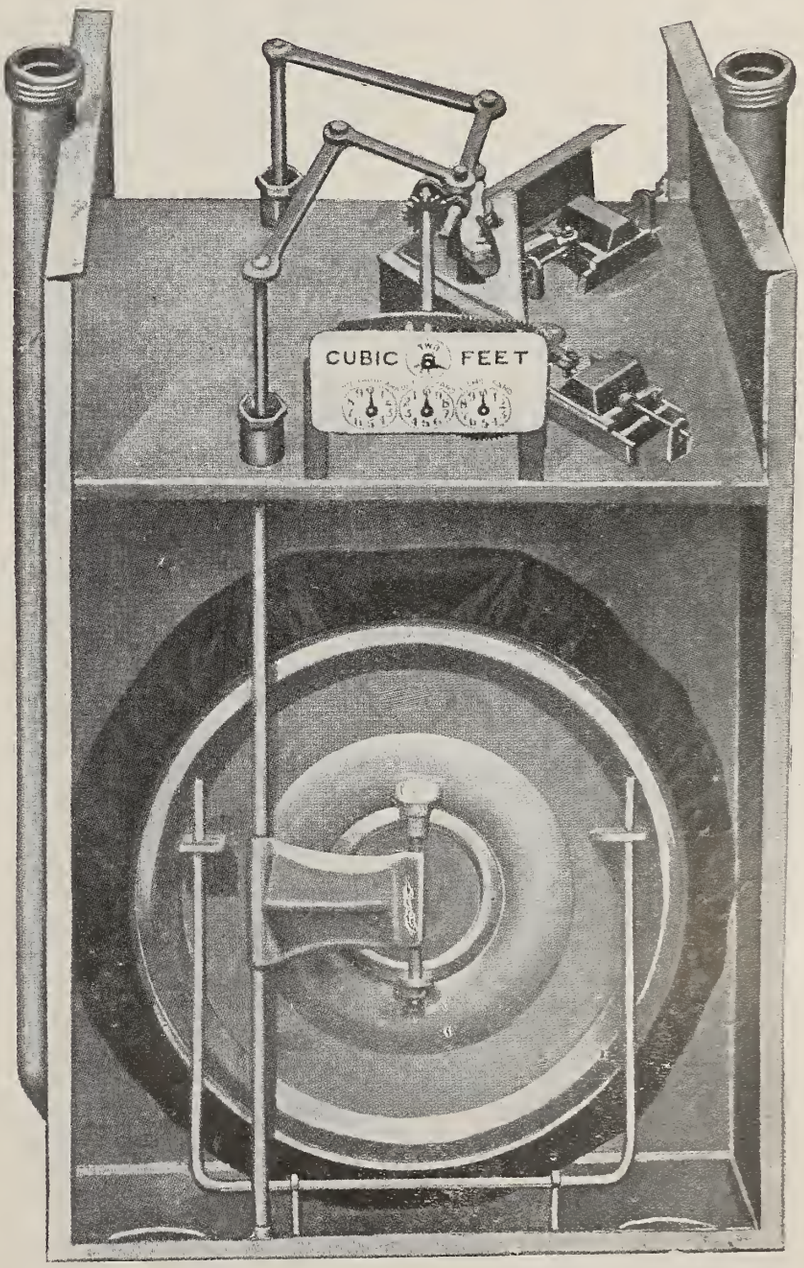
Agents for Station Meters

Provers

Wet Test Meters of all kinds

Experimental Meter for Gas and Air

Pressure Gauges in all sizes



WRITE FOR PRICES AND FULL INFORMATION

Office and Factory: 88-90 Caroline St. N., Hamilton, Canada

"MADE IN CANADA"

Let Us Figure On Your New Roofing

"MADE IN CANADA"

NO matter what kind of building you are erecting or re-roofing it will pay you to get in touch with us. If we cannot supply the roof which will be the most economical for you, we can at least give you the benefit of our experience and advise you as to which roofing would best suit your purpose.

NEPONSET ROOFINGS

BIRD NEPONSET PRODUCTS

Trade Reg. U. S. Mark Pat. Off.

are adapted for all types of buildings and each one is the best that can be made in its particular line.

Let us tell you about our Granitized Shingles or the NEPONSET Built-up Roof and other NEPONSET Roofings.

Granitized Shingles are the very latest shingle development, and not only make a durable roofing but are very attractive in appearance, being colored green.

BIRD & SON

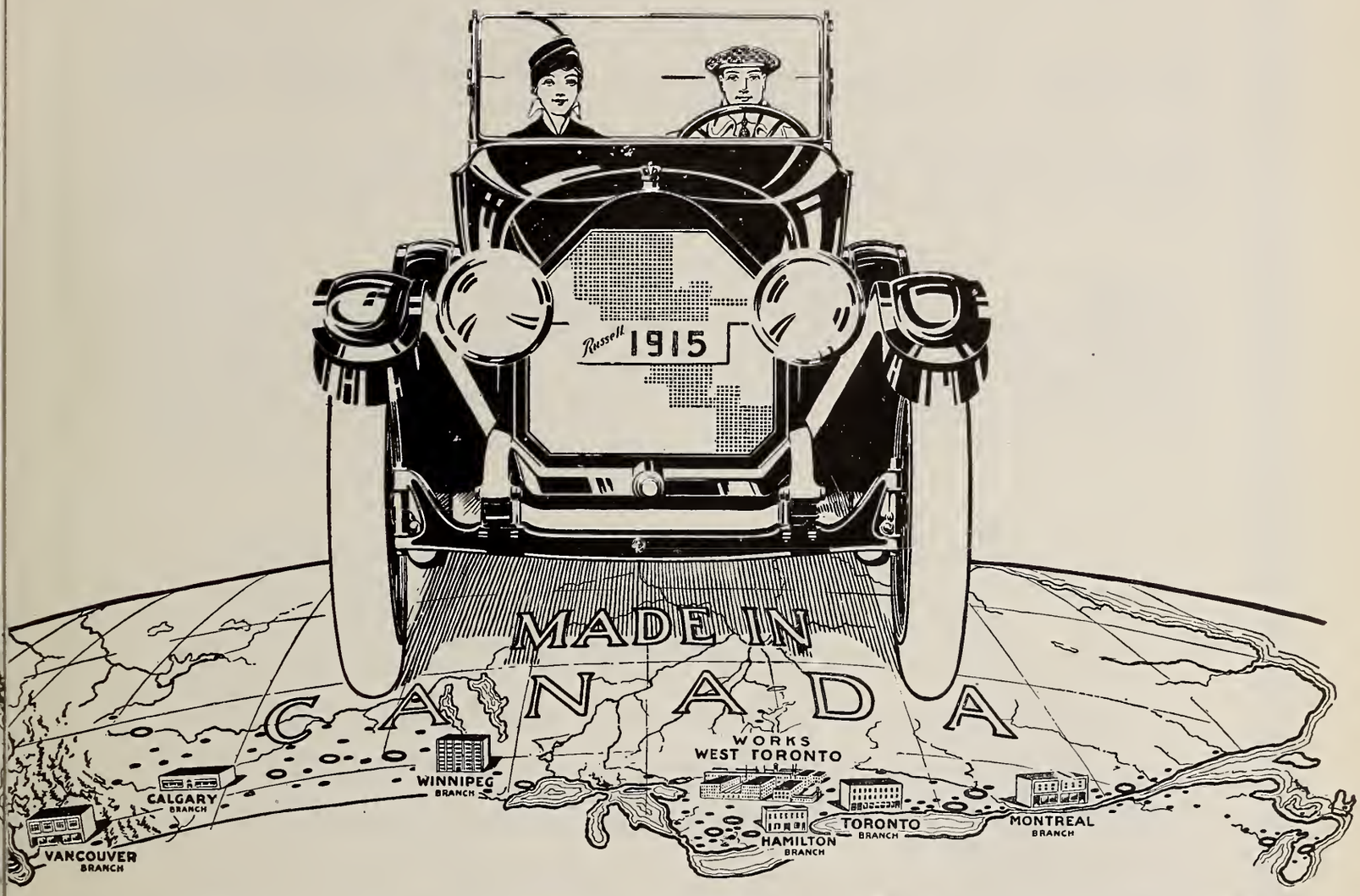
"MADE IN CANADA"

Heintzman Building
Hamilton, Ont.

BIRD & SON, East Walpole, Mass., U.S.A.

Name.....

Address.....



Russell Cars Guarantee Quality---Service---and Value

For every dollar you *invest* in a RUSSELL, you get a dollar of *tangible* value. ($1000 duty cannot add one cent of worth.) You get *more*. You *pay less*. You help develop a Canadian industry. You increase Canada's prosperity. The production of Russell cars gives employment to 1,500 men. Requires $2,000,000 worth of material yearly. Distributes over $1,000,000 in wages to Canadian mechanics.

More Beautiful

Latest European stream-line bodies. New rimmed fenders. Concealed door-hinges. Clean running-boards. Double head-lights. Lasting lustrous finish. Spare tires at rear. **Full equipment.** — Highest quality top. Built-in, non-vision, ventilating windshield. Demountable rims. Spare rim. Warner speedometer. Clock. Electric horn, etc.

More Comfortable

Perfectly-balanced chasses. Long three-quarter-elliptic rear springs. Ample wheel-base. Big wheels. New proven two-unit electric starting and lighting system. New instrument board (complete control at finger tips). Left side drive. Center control. Quick acting Collins side-curtains, opening with doors, and adjustable from seats.

More Efficient

Latest-type, long-stroke, smooth-running, high-efficiency engines. More power — less weight. Saving of fuel, oil and tires. Newest type ignition. Chrome nickle-steel gears and shafts. Cleverly designed chasses. Light, strong, heat-treated steels. Full-floating rear axle. Worm bevel gears. Double dust-proof brakes. Very low operative cost per mile.

Five reasons why YOU should drive a Russell "Made in Canada" Car:

1st: The highest-quality car—at the lowest price. **2nd: Most comfortable—easiest-riding—smoothest-running car built.**
3rd: Built of finest materials—by expert workmanship. Fully guaranteed and backed by service stations from coast to coast.
4th: Made in Canada—by Canadian workmen—in a Canadian-owned-and-operated plant.
5th: A vital unit in Canadian industry—whose success helps to build up Canadian prosperity—which in turn helps YOU.

Ride in a RUSSELL today. Performance proves its worth.

Agency applications invited in open territory

"6-30"--$1750 *"4-32"--$2650* *"6-48"--$4500*

Catalogue and full descriptive matter on request

Works and Executive Offices:
WEST TORONTO

RUSSELL MOTOR CAR CO., Limited

Branches:
TORONTO — HAMILTON
MONTREAL — WINNIPEG
CALGARY — VANCOUVER

Dodge Transmission Machinery and Elevating and Conveying Machinery

WE maintain very large stocks of our standard lines for quick shipment at close prices.

Shafting, Hangers, Pulleys (all kinds)
Friction Clutch Pulleys and Couplings
Rope Drives, Belt Tightners, Car Pullers
Power Shovels, Chain and Sprockets
Buckets, Take-ups, Spiral Conveyors
Sheaves, Gears, Transmission Rope
Belting all kinds, Safety Collars
Keyless Couplings

SEND FOR OUR CATALOGUE

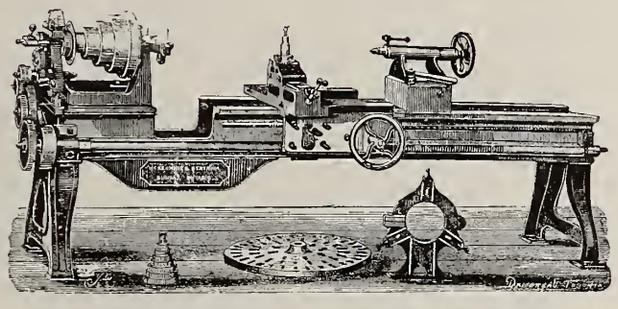
We are manufacturers in a large way and have very extensive and modern facilities.

Dodge Manufacturing Co., Limited

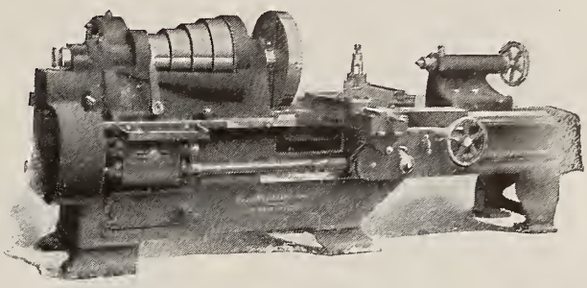
Engineers, Founders, Machinists

TORONTO MONTREAL

THE MARCH OF PROGRESS



36" GAP LATHE—1868



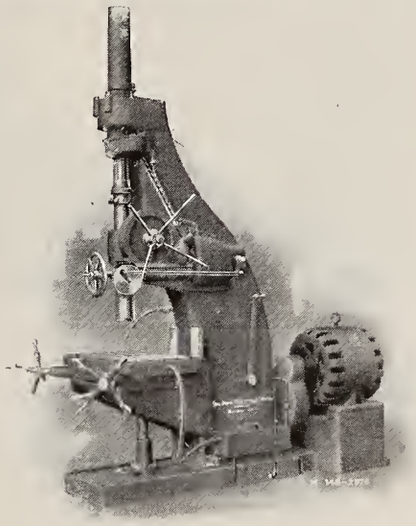
26" x 42" GAP LATHE—1914

49 YEARS AGO

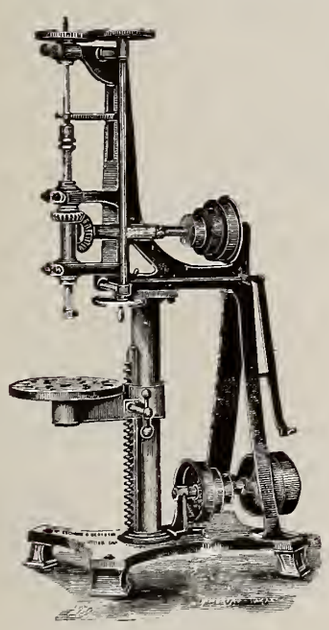
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And their reputation is founded on the solid rock of QUALITY

Let us quote you on your requirements.

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Reece's Screw Plate

because, although fully adjustable it has all the advantages of a solid die. It is so made that cutting cross threads is an impossibility. Dies can be reversed in the collet for use in a lathe or other machine.

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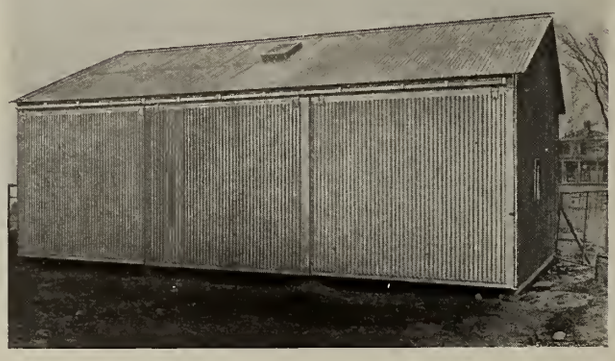
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NOTICE

To Manufacturers, Dealers and Users of Steam Boilers.

ALL boilers built in, or entering the Province of Ontario, and boilers exchanged or extensively repaired are subject to Government inspection as prescribed in the Steam Boiler Act.

All communications should be addressed to The Steam Boiler Branch, Department of Public Works, Parliament Buildings, Toronto.

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A Factory Telephone System, worked automatically without the trouble and expense of a central operator, will keep you in close touch with "Jones," and with every other man in your factory, from the Superintendent to the Watchman.



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gives you a factory telephone service that has the merits of simplicity, efficiency and economy. By pressing a lever you immediately get a connection with the department you wish.

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YOU save money in your own time; you save money in the time of your employees; and you save money in the better service you give your customers.

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How many minutes a day are wasted in this way or in having a foreman come to you to report on his work? While he is doing that he is unproductive. And his workmen have not his supervision. An important matter, is it not?

Increases Efficiency

A house Telephone system preserves your organization. Every man is in his place. Every man is doing the work allotted to him.

And the central control is perfect. You at your desk have a closer supervision over your factory than the superintendent of the small shop has over his.

No Running Expenses

Our automatic system has no expense after the cost — a very moderate cost — of installation. There is no central operator. A child can use it.

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You will be interested.

We manufacture all kinds of Telephone Apparatus, Manual and Automatic.

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Gramm Moving Van



Gramm Moving Van

Owned by J. T. BURROWS, "The Mover," Brantford, Ont.

Mr. Burrows writes us as follows: "Last week we went to Oshawa, Ont., a distance of 106 miles one way, or 212 miles on our job, moving the entire household effects of a six-roomed house, well furnished, in the short space of 23 hours actual time, including loading at Oshawa. Now, I must say that I am well satisfied with the truck, and I am breaking all records for long distance movings that have ever happened in Brantford in my twenty-third year in the carting and teaming business."

Gramm Trucks are made in capacities of 1 ton, 2 tons, 3½ tons and 5 tons
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The Gramm Motor Truck Co. of Canada Limited "Truck Makers Exclusively" WALKERVILLE, ONTARIO

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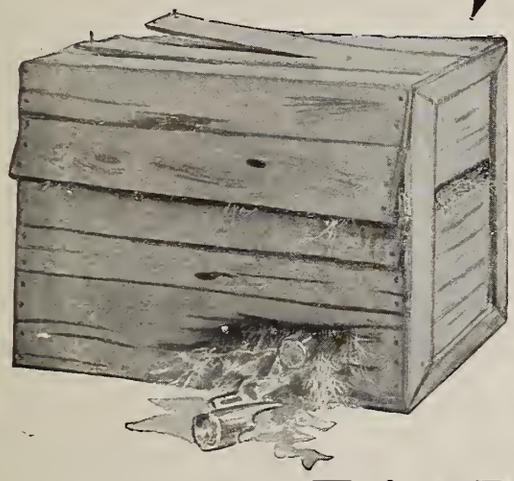
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HOW DOES YOUR PRODUCT LOOK WHEN IT ARRIVES AT ITS DESTINATION?

Do you want it to reach your customer or agent in a battered, splintered case, bruised and damaged—do you want your customer to get that kind of first impression? Do you like to be always negotiating over the replacement of damaged goods and return freight charges?

H. & D. Corrugated Board Fibre Boxes

Or do you want your product to arrive in a condition that will draw further trade instead of repulsing it? Clean and fresh—just as attractive as when it was packed? Don't you want your printed label on the package to be fresh and readable and the consignee's name perfectly legible and intelligible?



will protect your shipment against water, damp, damage—and the goods will be removed by your customer in just as good condition as when packed. Wood has become so expensive that it is not economy to use it for packing cases. But even if H. & D. Corrugated Fibre Board Boxes were not cheaper, they would still be vastly superior for any package weighing less than 100 pounds. Although they cost less and are a great deal lighter, they are five times as strong and have greater carrying power. The cellular construction of the board makes the cases so resilient that they will stand most extraordinary rough handling and abuse.



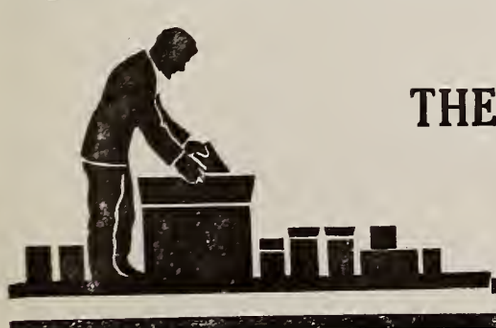
Trim Down Your Freight Bills

Save on each shipment the unnecessary expense occasioned by the greater weight of wood. H. & D. Corrugated Fibre Board Boxes will help you to make this saving and will put the shipment into your customer's place of business in better condition. Not only do the contents of the case go better in H. & D. Corrugated Fibre Boxes, but the box itself with its attractive monogram in colors, retains its freshness and attractive appearance when a wood box would be cracked and battered and not fit to be receipted for at the customer end.

Write us what you ship and ask for our free booklet "How to Pack It." We want to prove to you that you need H. & D. Corrugated Fibre Board Boxes in your business.

Let Us Design a Sample For Your Product

No matter what you have for shipment, we can design a better, cheaper, more satisfactory packing case than you are now using — a case that will save you 10 p.c. to 87 p.c. in freight charges — 25 p.c. to 50 p.c. in packers' time — 90 p.c. of your storage space. A saving in freight charges because the H. & D. Corrugated Fibre Board Cases are so much lighter than wood. A saving in packers' time because an H. & D. Case can be set up and sealed in one-half the time a wood box can be procured and nailed. A saving in storage space because a thousand H. & D. Cases can be stored in the space ten of your wood cases now occupy. We will gladly design a specimen case for you to specially fit your needs—that you may examine and test and prove. This will cost you nothing —involve no obligation. It will illustrate not only the economy and the efficiency of H. & D. Cases, but the better advertising value.



Write us to-day for full information.

THE HINDE & DAUCH PAPER CO.
LIMITED

TORONTO CANADA



When Germany Drew the Sword

LISTEN—

Copenhagen, Sept. 15.—The Berlin "Vossische Zeitung" discusses the extent to which German industry has already been hit by the war. Dr. Emil Lederer, the well known German author, says:

"The removal of all men capable of bearing arms has smashed industry to atoms."

All the links uniting the various trades have been broken.

"The unfortunate thing is that the liquidation, which is customary in all times of crisis, does not in the present instance affect merely the small body of speculators, but expresses the fact that German industry and its production are on fictitious bases.

"What?" asks Dr. Lederer, "are the decisive economic facts? Does the complete break-up of industry, which threatens the Germans, involve a disruption also of agriculture and the supply of necessities?

"The war means for Germany, the prevention of exports, the prevention of imports, of the means of subsistence, the reduction in the demand of all those at the front, and the restriction of the demand of all those remaining at home."

The German News Bureau has fallen from its high estate.

Before the sword was drawn the Bureau was smug, pompous and defiant.

It talked down to the world.

Its constant vaporings concerning Germany's science, art, and military prowess began to pall.

It lost no opportunity of proclaiming to the world that Germany was a cultured nation.

There was nothing good in the world that did not emanate from Germany.

Before the sword was drawn in vainglorious fashion, it recorded the blatant symposiums of the military headquarters staff.

With a wave of the hand, it issued invitations to the Kaiser's banquet in Paris ten days after the war would have begun.

It told of the overrunning of England, and the ruin of her commerce, and enthroned the Kaiser as Emperor of Europe.

The despatch from Copenhagen is telling a different story.

The Bureau has lost its self-assurance.

It will be observed from the despatch that Dr. Lederer has recommended the calling of a central committee to "see what can be done."

The Doctor should have thought of these things before the sword was drawn.

The public will look to the future with interest to learn how the Doctor's "central committee" is progressing.

It's beginning to look as if the Doctor was called in too late.

Canada's Business, Industrial and Agricultural Boom, Is Just Commencing

TEN MILLS OF TEXTILE CO. AT WORK FULL TILT

The stimulating effect of present conditions upon the Canadian cotton industry has resulted in the resumption of full working time in the ten mills of the Dominion Textile Company, Limited.

During the eight months prior to the commencement of the war in Europe, the 7,000 employees of this company were working on an average only 70 per cent. of full time.

Since the outbreak of hostilities they have been working full time, and if the present demand for Canadian cotton continues, as is likely to be the case, overtime and double shifts in certain departments will be necessary.

The operation at full capacity of the ten mills of the Dominion Textile Company, Limited, will mean the placing in circulation annually of upwards of $10,000,000.

Most of this large amount of money will be spent in Canada — in wages, in freight and cartage, in coal, oil and other factory supplies and in the many other items that enter into the cost of the finished product.

As the ten mills of the company are scattered from Kingston to Halifax the benefits accruing from the circulation of this large amount of money will be spread over a wide area.

What's the matter with Canada's Steel Plants and Iron Industries?

The London representative of one of the leading English dealers in builders' hardware and materials, is now in New York endeavoring to secure from America the steel and iron products formerly imported from Germany.

He wants nails, tubes, cast iron pipes, structural steel, sheets, lead, glass, porcelain and enamelled baths and builders' hardware.

He says :

"In the six months from January to July of this year, the English imported wire and wire nails from Germany and Belgium to the total amount of 120,000 tons.

"Nearly an equal amount of these goods passed through English ports on their way to Australia, Africa, South America and other countries to which they are exported from the European Continent.

"In the same six months' period we took 160,000 tons of steel billets from Germany, 60,000 tons from Belgium and only 20,000 tons from the United States. Out of 261,000 tons of steel sheet bars imported by us, Germany supplied 205,000 tons.

"Germany also sold us 80,000 tons of iron bars and 46,000 tons of girders during the six months period, and in the same time we took 30,000 tons of tubes and 100,000 tons of plates, mainly from Germany and Belgium.

"The bulk of our imported hardware comes from the Continent, and in the six months' period I have referred to we bought these goods to the value of $4,300,000.

"At the same time we also took electrical goods to the value of $5,000 000, machinery to the value of $25 000,000, and motor cars and parts to the value of $25,000,000.

"Germany has been strongly represented in our importation of electrical goods and machinery.

"We have been buying $750,000 worth of window glass a month from Belgium, and this field is now closed to us, as well as that of Germany.

"We shall have to depend on the American and Canadian manufacturers for these supplies, in addition to a great variety of other goods."

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Canadian Hart Wheels

CUT FASTER LAST LONGER

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Tell us the service you want performed and we will supply you with an abraser that will save you time, money and worry.

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that jarring, grinding noise in your machine shop caused by the metal gears?

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NEW PROCESS GEARS
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They last indefinitely too.

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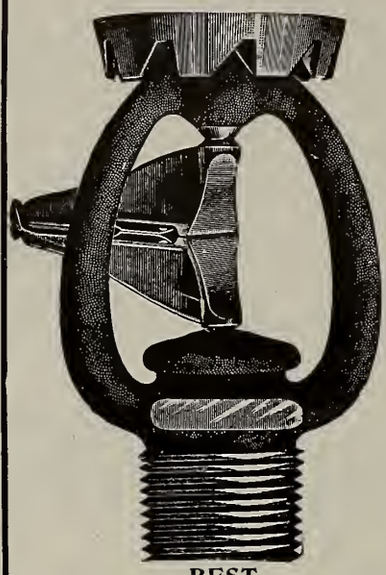


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Steel Buildings of all Kinds
Railway and Highway Bridges
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LARGE STOCK OF STANDARD STRUCTURAL MATERIAL AT ALL WORKS

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5,000 Tons Standard Structural Shapes Carried in Stock for Quick Delivery.

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25 Spans, Weight 2,500,000 Lbs.

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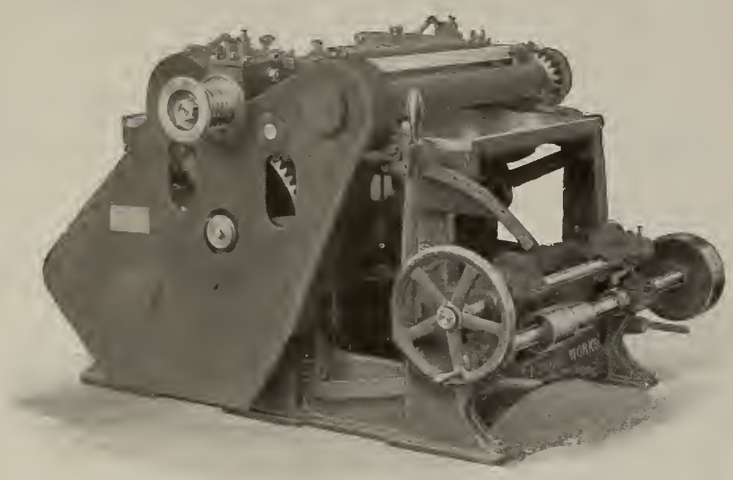
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WE have specialized in planing machines for years. Berlin surfacers represent the experience of all these years. You can make no mistake by putting your surfacing requirements up to us. We build surfacers for every purpose. Whatever surfacing you want to do may be done at lowest cost on Berlin.

Are Your Cabinet Surfacers Losing Money For You at the Sander?

Are you thinking of replacing or adding to your present surfacing equipment? Then judge the earning-power of Berlin Surfacers by comparing them with others. Mail your card request for complete data now — so you'll have it for reference when you want it.

DON'T depend on your sander to correct the inferior work of your surfacers. That isn't profitable. The inefficiency of one machine is handicapping the other.

Surface your stock on the Berlin "156" Single Cabinet Surfacer. Then once through at the sander will suffice. And instead of sanding two pieces at one time the uniformity of the surfacing will enable your sander operator to feed stock across the entire width of the machine. Its efficiency is increased 100 per cent. That assures profit, absolutely.

Equipped with round heads carrying thin steel knives, which may be ground and jointed on the machine the "156" produces a finish that shines. Sanding all your stock won't be necessary.

The sturdy construction and the use of only proven design features assures low upkeep cost. There'll be fewer necessary shut downs, less lost time. The top in-feed roll and chip-breaker may be sectional. The wedge method of bed adjustment assures its stability. Fine finish is therefore assured always.

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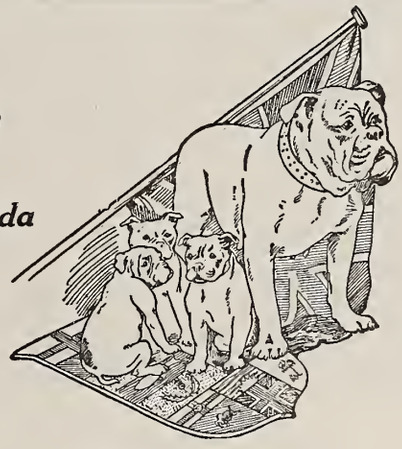
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Engineer's Supply Co., 123 Bannatyne Ave. E., WINNIPEG

G. & McC. Co. SECTIONAL WATER TUBE BOILERS

Have forged steel staggered headers of large area — positive and rapid circulation — straight 4-inch tubes — large steam and water drums — increased steaming capacity — enlarged area for combustion — connecting nipples of increased size — ease of transportation and facility of erection.

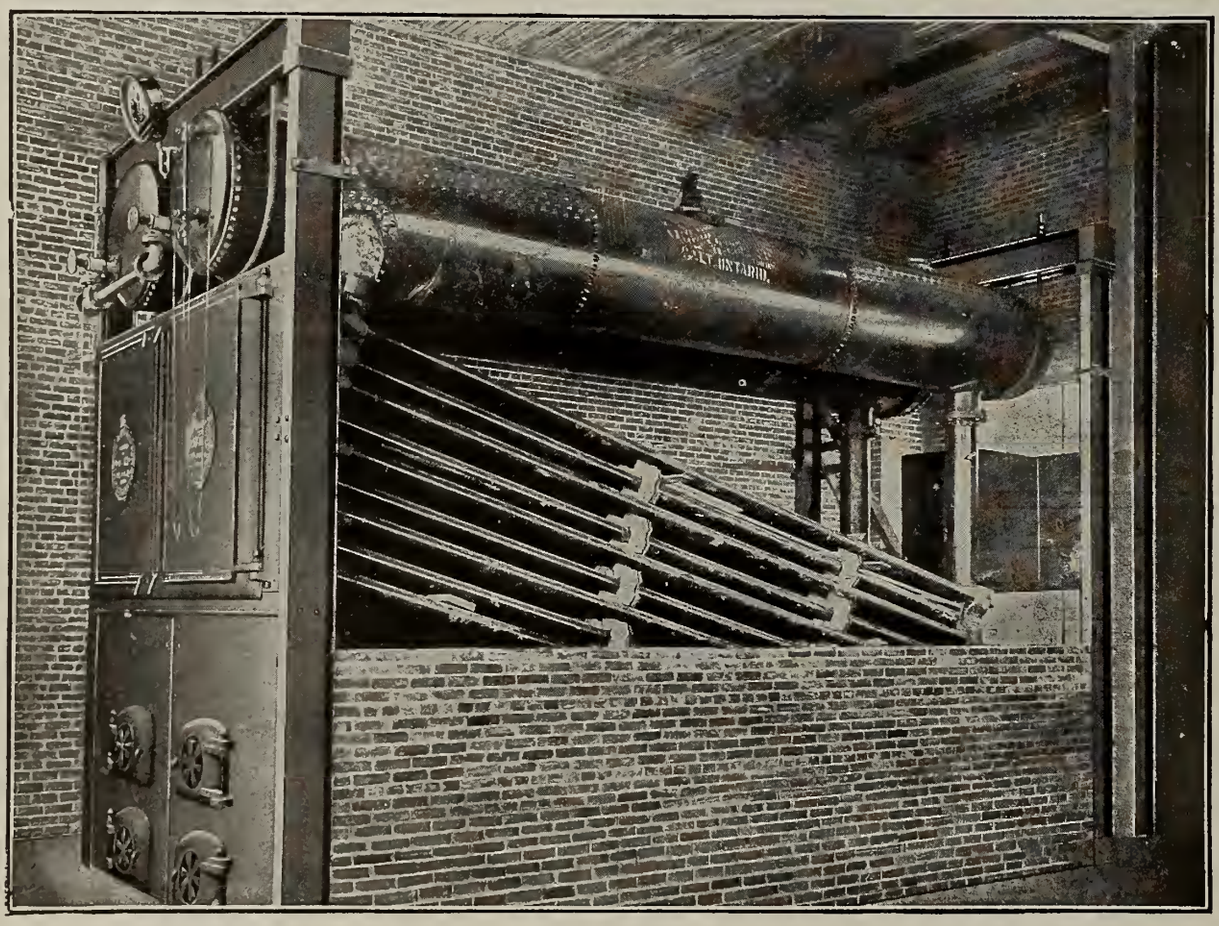


Illustration shows one of our Standard Type "A" Double Drum Sectional Water Tube Boilers, installed at the plant of the Kelsey Wheel Company, Ltd., Windsor, Ont.

We have installed a special plant for the construction of Sectional Water Tube Boilers and will be pleased to quote prices. Write us for our new Water Tube Boiler Bulletin No. 30.

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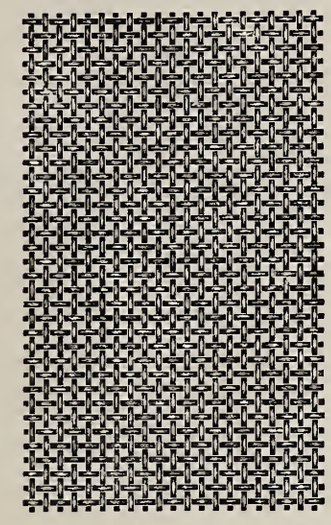
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HON. JAS. S. DUFF, Minister of Agriculture
W. C. McGHIE, Chairman of the Board

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HIGH GRADE PAPERS

MONTREAL, CANADA September, 1914

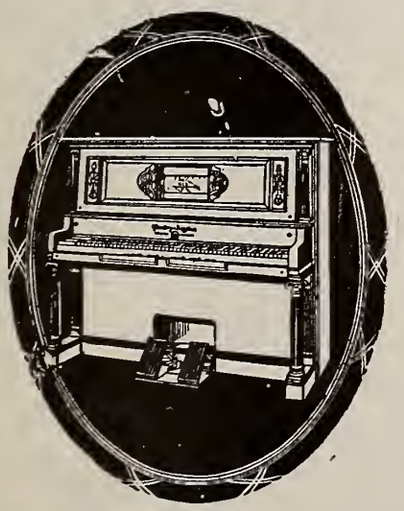
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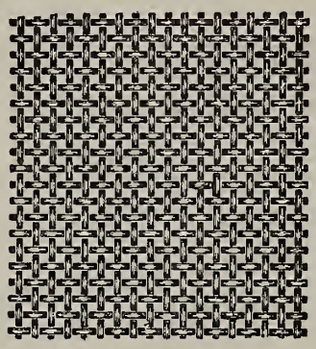
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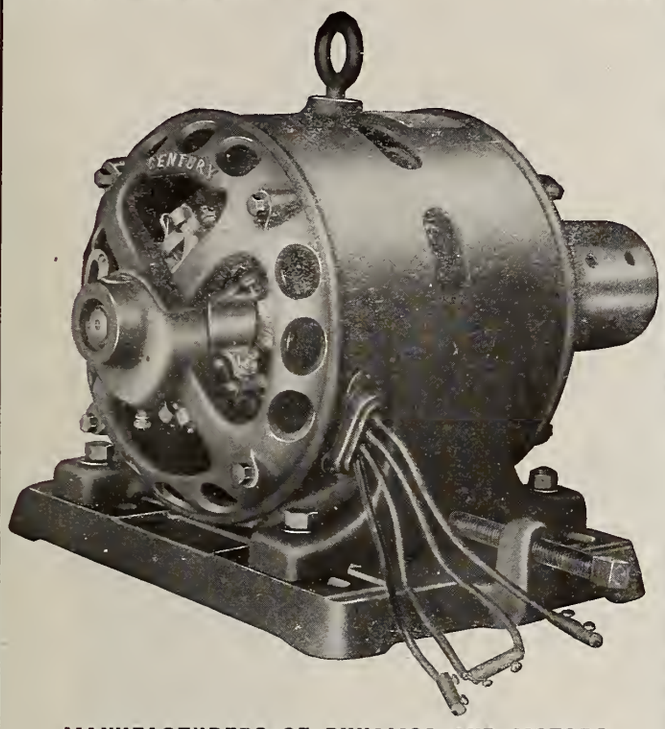
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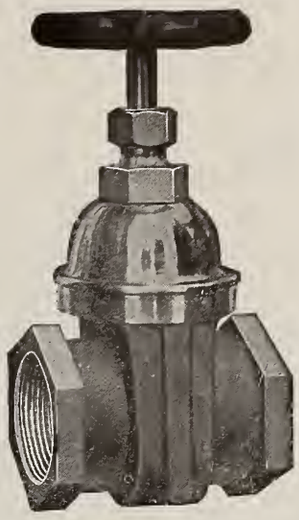
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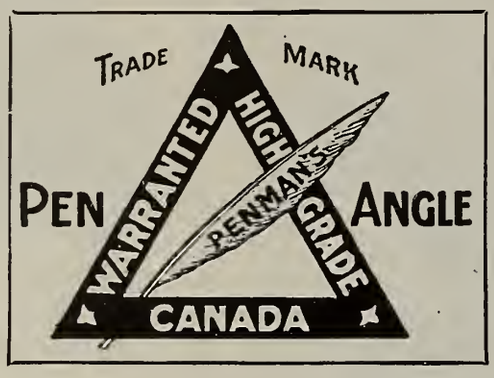
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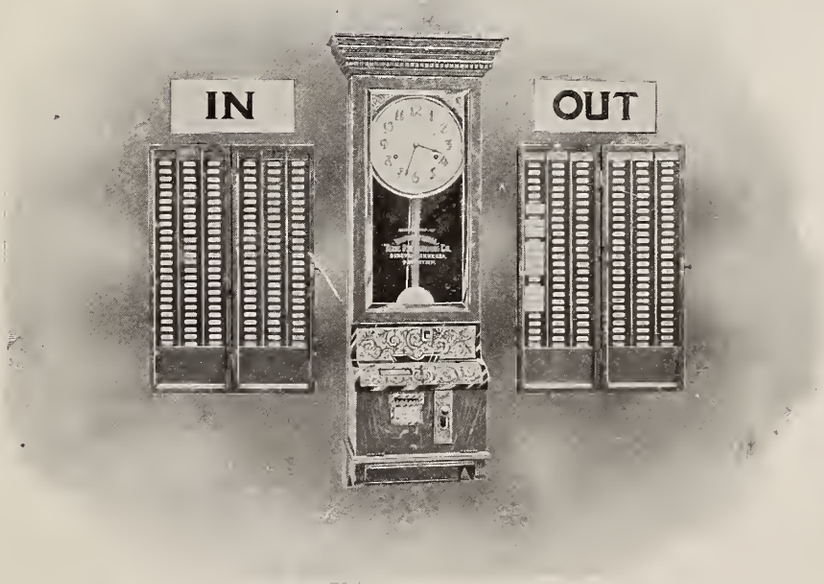
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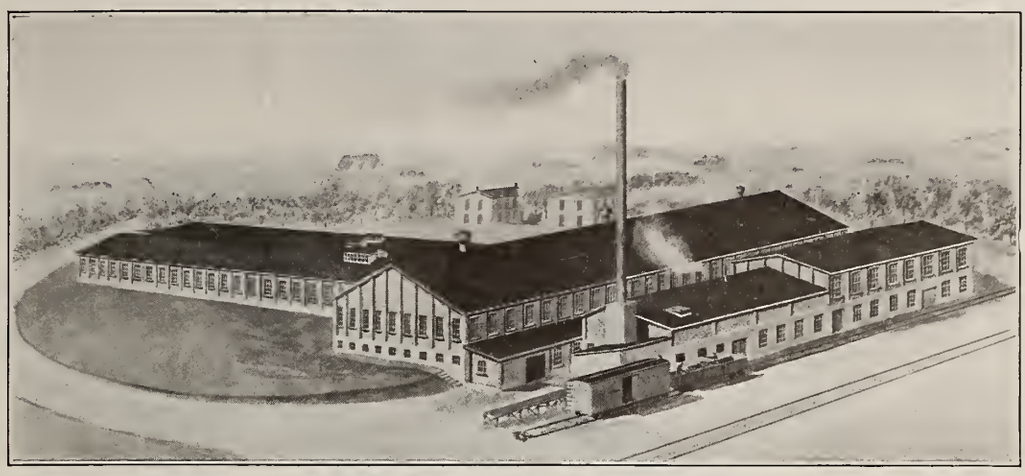


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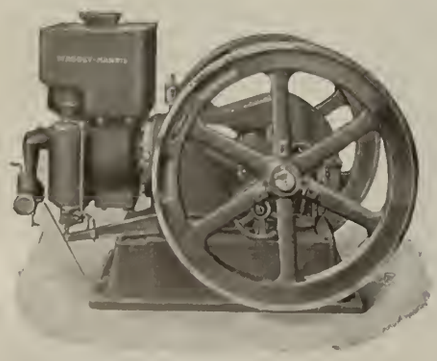
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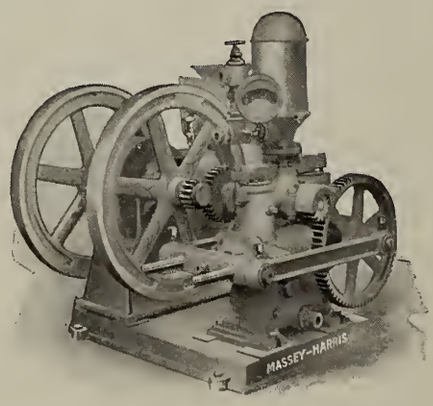
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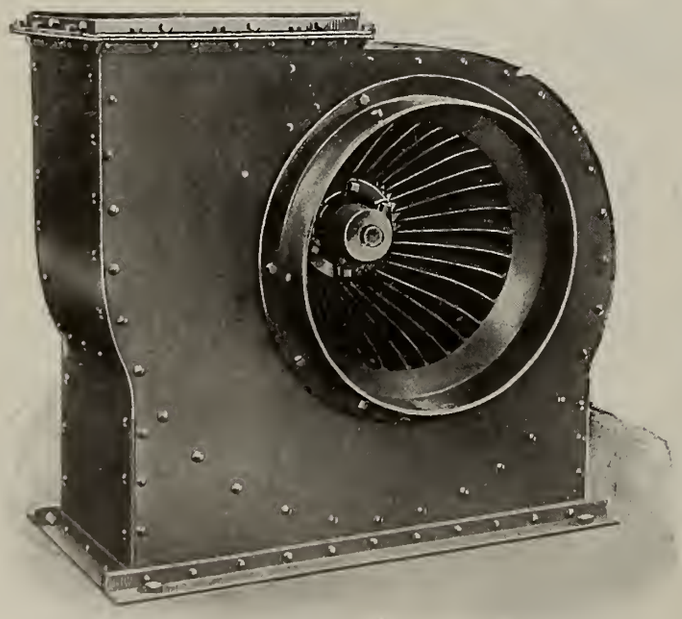
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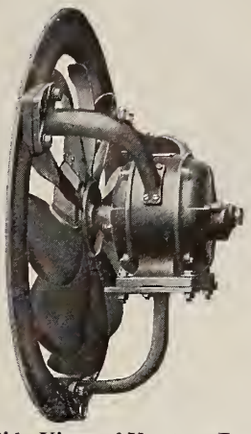
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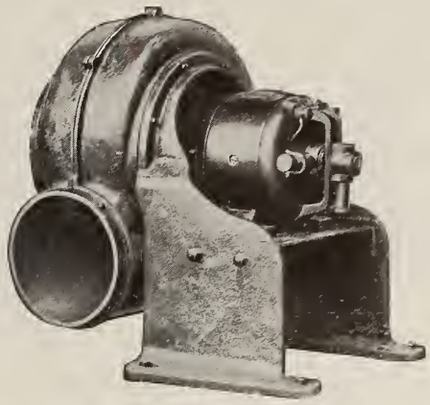
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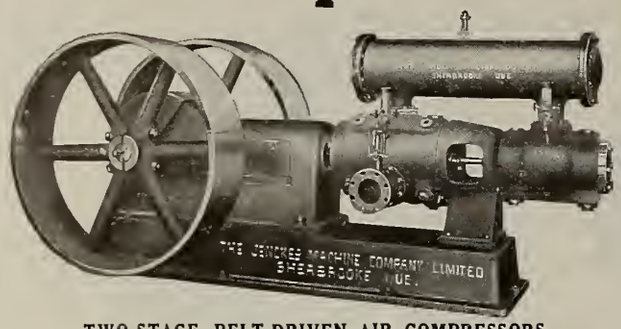
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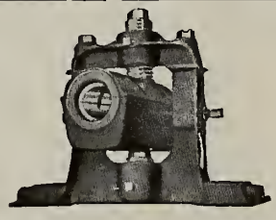
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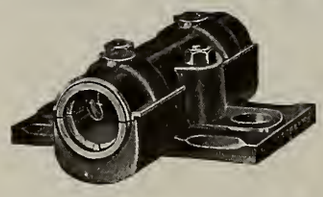
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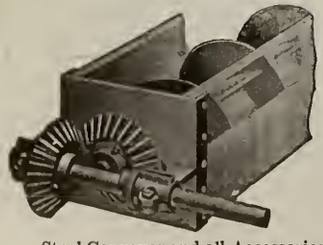

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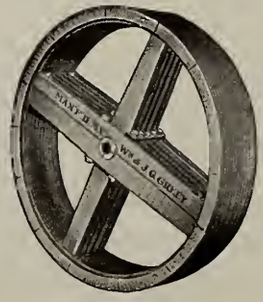

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INCORPORATED.

Vol. XV. | TORONTO, OCTOBER, 1914 | No. 3

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Manager Transportation Department . . . . J. E. Walsh
Managers Insurance Department . Willis, Faber & Co., Limited
Manager Tariff Department . . . . . J. R. K. Bristol
Legal Secretary . . . . . F. W. Wegenast
Assistant Secretary (Montreal) . . . . H. T. Meldrum
Assistant Secretary (Winnipeg) . . . . G. F. C. Poussette

Co-operate With the Manufacturers and Win.

THE manufacturers of Canada are making great efforts to restore the industrial equilibrium of the country. In putting forth such efforts they are acting in the public interest as well as their own.

As manufacturing supplies more wealth than any other national source, the maintenance of industrial activity is a vital necessity for the country. The prosperity of the banks, of wholesalers, of retailers and of industrial employees is so closely connected with the uninterrupted turning of factory wheels that widespread closing of factories would produce a condition bordering upon a panic. The "Closed Until Further Notice" sign on a factory is a calamity for the community, involving all classes.

It is safe to say that Canadian manufacturers realize that the distress caused by the shutting down of factories on account of economic conditions is intensified when these conditions are aggravated by the uncertainties of war. Consequently, they are making sacrifices which ordinary business practice would condemn. The idea of profit enters into the calculations of few Canadian manufacturers at present. Many are paying their men out of personal funds, and many others who can obtain credit are going heavily into debt for the same purpose. It is easy to exhort a manufacturer "to keep his plant running," but the difficulty of that operation will be admitted even by the most insistent advisers when the factory warehouse is full of unsold goods, when no orders are coming in, and when no more money can be secured. Confronted by these three obstacles, the manufacturer can only shorten his working hours, then lay off a number of employees, then reduce the pay of those remaining, then shut down his plant, and after this stage his property may pass into the assignee's hands. These gradual and desperately-fought industrial battles are being waged just now in every Province in Canada.

When war broke out there was danger of an industrial panic. Credit was restricted, and consumers limited their purchases to necessities. If the manufacturers of Canada had adopted a policy of wholesale retrenchment the consequences would have been serious. But they stood fast, giving ground only when necessary. As a result of this cool-headed courage the possibility of panic is passing. Industry is readjusting itself, and although there will scarcely be any immediate impetus, further setbacks are improbable, provided the fortunes of war do not turn seriously against us. But those who look for any such quick recovery will be disappointed. If opportunities have been opened to Canadian manufacturers by the war, other opportunities have been closed.

The exclusion of goods formerly imported from nations at war goes hand-in-hand with determined attempts to flood our home market with the manufactures of neutral nations. We can begin to manufacture some goods formerly imported, but the processes are difficult to master and establish. We can try to capture foreign trade, but the obstacles in the way are serious, though by no means unsurmountable. Canadian manufacturers are performing a great feat by merely holding their own under existing conditions. Slowly but surely, however, they will begin to win. They will gain ground in their home market; they will manufacture at least some of the goods formerly imported, and they will increase their export trade.

One of the great sources of strength of our manufacturers is the growing sentiment in favor of Canadian-made goods. Consumers realize, as they never realized before, that every dollar sent out of Canada for an article made at home defers the return of good times.

The present industrial struggle is a desperate one, but Canadian manufacturers will win it if Canadian buyers will persist in their present tendeney to substitute Canadian-made goods for goods whieh they formerly imported.

Manufacturers Thank the Press.

THE manufacturers of Canada are deeply grateful to the press for the patriotic attitude taken toward Canadian-made goods. It would be easy to fill the present issue of INDUSTRIAL CANADA with articles and editorials from Canadian newspapers urging eonsumers to buy Canadian manufactures during the war.

Politics and economic eontroversies are alike forgotten and newspapers and journals of various shades of opinion unite on the necessity of retaining Canadian money in the country. and of keeping Canadian industrial employees busy. They agree that suehaetion will benefit the whole country. Such unanimous and powerful support is indeed encouraging to Canadian manufacturers.

Difficulties of Export Trade.

THOSE who advise Canadian manufacturers to go after export trade often do so without any adequate comprehension of the obstacles whieh must be encountered. The advice is sound enough in a general way, well meant, and few manufacturers will disagree with it. But how is it to be put into practice?

It is a difficult thing for the manufacturers of a young country to conduct selling operations wholesale, across great distanees, with foreigners by means of strange laws and systems.

The Canadian manufacturer who exports to foreign countries must first discover where his goods may find a market. which is not so simple a task as many people appear to think, then he must make and sell his goods in the face of fierce eompetition with older countries. True, much of this competition is now dormant, but a great deal is still active. To make and market his products he must have capital, which is now difficult to secure, also the facilities of transportation, which have been considerably deranged by the war. Finally, there remains the important task of collection, and in touching this subject it is interesting to notice that, according to *The New York Annalist,* moratoria have been declared by nineteen countries suspending partial or entire payment of debts.

These are some of the difficulties which Canadian manufacturers must face. They are relieved from some of the old obstacles whieh discouraged them from seeking export fields, but they are confronted by new obstacles which are by no means negligible. Determined efforts are being made, and will be made, largely by the use of skilled salesmen familiar with foreign languages and eonditions, to increase Canadian exports of manufactured articles, but manufacturers might possibly be better assisted to make a permanent entry into the export field by a sympathetic understanding of the diffieulties involved than by vehement goadings from many quarters where the situation is not entirely comprehended.

We have had considerable advice, whieh we are always glad to get, because some of it is valuable. Now tell us where to sell some goods. The export trade in manufactures of any country rarely assumes large proportions until that country's imports of manufactured goods falls to a minimum. In other words, Canadian manufacturers would be strengthened in their attacks upon foreign markets if Canadians had purchased at home as much as possible of the $686,000,000 worth of goods imported during 1913.

Ladies to the Rescue.

THE women of Canada can do more than the men to reduce our huge importations of foreign manufactures. Women are the real captains of finance. Where they do not hold the family purse-strings they at least influence them. They buy mueh, and they cause their admirers, fathers, husbands and brothers to buy more.

If they resolve to buy Canadian goods our industrial battle is half won.

What are they doing?

From Ottawa eomes the report that the Household League wants "Made-in-Canada" goods. The Daughters of the Empire, always patriotie, are calling for their own country's manufaetures. Many other women's associations are taking up the ery. Already in the cities and towns merchants are beginning to display Canadian goods when a woman of patriotic appearance enters the door.

Let the women lead the way, and the men must gladly follow.

Delay Not Through Manufacturers.

ARTICLES, which are not free from the suspicion of inspiration, have appeared recently in some Ontario papers inferring that the Workmen's Compensation Act, slated to go into effect on January 1st, might have its date of operation postponed through the efforts of manufacturers.

No representations have been made by the Canadian Manufacturers Association, or so far as we know by its members individually, to the Ontario Government on this matter.

If the operation of the Act is delayed it will be because of defects which were pointed out on behalf of the Canadian Manufacturers Association when the bill was before the Legislature. Unless the Commission ignores entirely certain parts of the Act and blazes out its own trail it will be necessary to wait for another session of the Legislature before the Act can go into operation.

Buy in Canada or the British Empire.

IN the September issue of INDUSTRIAL CANADA we published an extract from *The American Metal Market,* which advised and encouraged United States manufacturers to try to sell more of their products in the Canadian market "because supplies from England are entirely shut off, as within twenty-four hours of war embargo was laid upon the exportation of all metals."

The inaccuracy of this statement is illustrated by the experience of Messrs. A. C. Leslie & Company, Limited, of Montreal, who have informed us that since the outbreak of the war British iron and steel, with the exception of two or three lines of virgin metals, have been coming to them freely, and that even these lines of virgin metals are now obtainable in Britain.

British mills and workmen need all the trade they can get, and Canadians should buy in Britain or other parts of the British Empire as much iron and steel products as possible if these cannot be secured at home.

A WORD TO CANADIAN PRODUCERS

By SIR GEORGE E. FOSTER

Canadians are intensely interested in the gigantic struggle now staged on the battlefields of Europe.

There is being fought out and there will be decided the mastership of the Old World—the control of the seas—the question of liberty and democratic government in Europe.

Though primarily a quarrel between three great European powers, it has developed into a war for the existence, integrity and supremacy of the British Empire.

The British Empire is now or soon will be represented on the battlefield by troops from the Motherland, Canada, Newfoundland, Australia, New Zealand and South Africa, which releases British soldiers and substitutes her own in their place.

Involved in this war is the question of commercial ocean transport and overseas trade.

For years Germany has made superhuman efforts towards building up a great industrial system at home and a vast overseas trade with its attendant strong commercial marine.

Comparing 1893 with 1913, her industrial output has wonderfully increased, and the same is true in reference to her export of industrial products.

Her sea tonnage from 1,511,579 to 3,153,724.

Her foreign trade from $1,678,780,600 to $4,966,298,400.

In 1913 her exports were as follows:—

To Great Britain	$342,291,600
Canada	14,473,833
Australia	21,063,000
South Africa (British)	11,162,200
New Zealand	2,546,600
United States	169,741,600
France	187,996,200
Russia	209,440,000
China	29,226,400
Japan	29,202,600
South America	157,960,600
All other countries	1,227,862,387
Total	$2,402,967,000

Under present war conditions she has lost for the time being nearly all this trade; her industrial production has been greatly reduced and her commercial marine has been practically swept from the seas.

What this means to Germany, we can all see; a total loss during the continuance of the war and a long period of struggle after ensuing peace to regain even a part of her former proud and profitable position, and a probable loss of her expensive and hardly bought colonial possessions.

What we do not so clearly see is that this immense void in production and distribution must be filled—others must step into her place to make and distribute what Germany has for the time been forced to surrender.

For the British Empire, home and overseas—the instant pressing duty is to possess itself of a generous share of the production and trade thus lost to Germany, and so to reap the advantages of a great industrial and commercial victory which shall in some measure compensate the costly sacrifice of war. Not only should we fill to the greatest possible extent the void thus created, but we should make our position so strong in these markets as to secure ourselves from our being ousted by Germany hereafter.

Whilst a comparatively small number of our manhood fights the battle for Imperial existence and control of our ocean highways, those who remain should, with spirit and energy throw themselves into the task of taking possession of the markets from which our enemies have been driven and supply them with the products of our own fields and factories.

Here is a peaceful field of operation in which we can carry on a bloodless but most effective and profitable warfare.

First let us fill as far as possible the call for the $16,000,000 worth of goods with which Germany and Austria provided us last year, and which will this year be absolutely debarred. And what we cannot supply ourselves let us purchase from Great Britain and the other parts of the Empire. Let us covenant together to buy goods 'made in Canada,' 'made in Britain,' and 'made in the Empire.' Thus shall we give employment and the profits of production to the Empire's home workers.

Then let us find out the details of what Germany and Austria have produced and sold to other countries and set ourselves to supply as large a part of this as possible.

Whilst our soldiers and sailors preserve our homes from attack and our ocean highways open and secure for transport, let us enter upon these abandoned markets and possess them as far as possible.

Here are markets for hundreds of millions of dollars' worth of products, the making of even a portion of which will keep our industries going and give employment to hundreds of thousands of our people. If consumers determine to buy only Canadian and Imperial goods, and producers to provide them at lowest prices and of good quality, a co-operative work of inestimable value will have been begun.

ARE YOU BUYING MADE-IN-CANADA GOODS?

In the following sets of tables are shown articles which were imported into Canada during the fiscal year, 1913, although all of them are made in this country. Figures relating to factories, wages, employees, etc., from census of manufactures, 1911.

Why do we send such vast sums of money out of Canada when we need them to keep our factories running and to give employment to our workers?

Consumers—Can't you buy these goods at home during the war?
Manufacturers—Are you making these goods of the right quality and at the right prices?

WHAT FARMERS BUY ABROAD.

Farmers! Do you realize that there are 77 agricultural implement factories in Canada, paying 726 salaried officers $811,897, and 8,834 wage earners $4,739,750 annually, and making products worth $20,722,722? These people use the articles you grow. Why don't you buy the things they make? Give them employment during the war. You buy these articles abroad although they are made in Canada.

	Quantity.	Value.
Carriages and buggies ..... No.	1,928	$107,058
Carts, pleasure and vehicles, N.O.P. ... No.		
Children's carriages and sleds	.....	316,423
Complete parts of farm and freight wagons, drays and sleighs	.....	132,618
Complete parts of buggies, carriages and vehicles, N.O.P., including parts of cutters, children's carriages and sleds, N.O.P.	.....	38,314
Cutters ..... No.	24	389
Farm waggons ..... No.	11,349	446,037
Freight waggons and drays ..... No.	2,604	196,914
Scrapers, railway or road	.....	149,064
Sleighs ..... No.	1,100	21,642
Wheelbarrows, trucks and hand carts.. No.	27,503	194,984
Total carriages, etc.	.....	20,802,322
Bone dust, bone black or charred bone and bone ash ..... Cwt.	75,562	123,476
Fertilizers, compounded or manufactured...	.....	539,905
Fertilizers, uncompounded or unmanufactured, N.O.P.	.....	739
Binder twine ..... Lbs.	29,752,123	2,320,351
Binder twine, articles for the manufacture of	.....	25,474
Cordage, cotton, of all kinds ..... Lbs.	269,695	37,192
Cordage and twine of all kinds, N.O.P... Lbs.	4,361,418	534,227
Agricultural implements:—		
Agricultural implements, parts of ...	.....	1,624,951
Binding attachments	.....	49,319
Cultivators, weeders ..... No.	8,115	66,416
Drills, seed ..... No.	7,632	282,478
Farm, road or field rollers ..... No.	203	81,296
Forks, pronged ..... No.	13,039	7,278
Harrows ..... No.	7,489	176,853
Harvesters, self-binding ..... No.	2,316	215,129
Hay loaders ..... No.	1,066	$52,371
Hay tedders ..... No.	2	86
Hoes ..... No.	7,779	2,031
Horse rakes ..... No.	1,901	44,203
Knives, edging ..... No.	2,541	1,442
Knives, hay or straw ..... No.	10,173	3,533
Lawn mowers ..... No.	13,918	57,383
Manure spreaders ..... No.	353	21,585
Mowing machines ..... No.	2,352	76,662
Ploughs ..... No.	27,389	1,371,243
Post-hole diggers ..... No.	4,199	4,412
Potato diggers ..... No.	3,527	65,344
Rakes, N.O.P. ..... No.	18,844	4,994
Reapers ..... No.	1,389	68,599
Scythes ..... Doz.	2,734	12,291
Sickles or reaping-hooks ..... Doz.	290	619
Snaths ..... Doz.	7	38
Spades and shovels of iron or steel, N.O.P. ..... Doz.	10,877	48,166
Other agricultural implements, N.O.P.	.....	102,124
Total agricultural implements	.....	4,445,484
Threshing machine separators .... No.	3,293	2,176,077
Threshing machine separators, parts of, including wind stackers, baggers, weighers and self-feeders therefor and finished parts thereof for repairs, when imported separately	.....	486,954
Engines, portable, with boilers in combination, and traction engines, for farm purposes ..... No.	4,024	7,369,219
Fanning mills ..... No.	1,258	24,179
Fodder or feed cutters..... No.	527	9,892
Grain crushers ..... No.	204	3,080
Horse powers for farm purposes .No.	12	310
Wire:—		
Barbed, fencing ..... Cwt.	446,122	887,974
Buckthorn strip fencing, woven wire fencing, and wire fencing of iron or steel, N.O.P., not to include woven wire or netting made from wire smaller than No. 14 gauge not to include fencing of wire larger than No. 9 gauge ..... Lbs.	1,653,214	74,352
Twine, manufactures of, viz.:		
Hammocks and lawn tennis nets, sportsmen's fish nets and other articles, N.O.P.	.....	51,995
Total cordage, rope and twine and manufactures of	.....	2,979,239

WHAT ARE THE HOUSEKEEPERS BUYING?

The housekeeper is Canada's greatest purchasing agent. Manufacturers, are you making goods that she wants to buy? If you are, why is she buying so much abroad? Court the housekeepers. Housekeepers, do you ask to see made-in-Canada goods before buying? Keep our own workers busy. Here are articles which the housekeepers buy abroad:

	Quantity.	Value.
Baskets of all kinds, N.O.P.	.....	$127,000
Baths, bath-tubs, basins, closets, lavatories, urinals, sinks and laundry-tubs of any material	.....	423,349
Bells, imported for use of churches only ..	.....	63,656
Bells and gongs, N.O.P.	.....	55,611
Belts, of all kinds, N.O.P., except silk	.....	129,179
Blacking, shoe and shoemaker's ink, shoe, harness and leather dressing N.O.P.....	.....	126,249
Blinds of wood, metal, or other material, not textile or paper	.....	8,406
Blueing, laundry	.....	50,066
Brooms and whisks	.....	19,834
Brushes of all kinds	.....	677,463
Hair brush pads	.....	.....
Buttons, all kinds, covered or not, N.O.P., including recognition buttons, and collar and cuff buttons	.....	809,702
Candles:—		
Paraffine wax ..... Lbs.	277,130	34,816
Other candles, N.O.P. ..... Lbs.	543,621	63,889
Carpeting, rugs, mats, and matting of straw.	....	99,301
Carpets, N.O.P. ..... Yds.	4,011	$2,150
Cocoa carpeting, mats, rugs and matting...	.....	38,839
Mats, door or carriage, other than metal, N.O.P.	.....	1,194
Total carpets, mats and rugs, N.O.P.	.....	141,484
Carpet sweepers ..... No.	3,578	13,305
Carpeting, rugs, matting, and mats of hemp or jute	.....	85,119
Carpet linings and stair pads	.....	1,818
Clothes wringers and parts thereof for domestic use ..... No.	12,117	36,486
Charcoal	.....	76,278
Coke ..... Tons	710,109	2,023,253
Coke, ground, the manufacture of electric batteries ..... Cwt.	5,362	6,192
Curtains and shams when made up, trimmed or untrimmed	.....	738,875
Earthenware and chinaware:—		
C. C. or cream-colored ware, decorated, printed or sponged, and all earthenware, N.O.P.	.....	296,638
Demijohns, churns or crocks	.....	25,486

	Quantity.	Value.
Tableware of china, porcelain, white granite or iron-stone ware	.....	$2,166,163
Tiles or blocks of earthenware or stone prepared for mosaic flooring	.....	176,808
Tiles, earthenware, N.O.P.	.....	276,913
Manufactures of earthenware, N.O.P.	.....	193,353
Total earthenware and chinaware	.....	3,265,180
Elastic, round or flat, including garter elastic	.....	184,908
Paints and colours:—		
Blanc fixe and satin white ..... Lbs.	3,335,027	36,150
Brocade and bronze powders	.....	28,914
Colours, dry, N.O.P. ..... Lbs.	8,026,329	307,604
Gold liquid paints	.....	11,286
Lead, white, dry ..... Lbs.	2,912,054	159,848
Lead, white, ground in oil ..... Lbs.	739,892	40,697
Liquid fillers, anti-corrosive and anti-fouling paints, and ground and liquid paints, N.O.P.	5,458,338	496,714
Metallic colours, viz.: oxide of cobalt, copper and tin N.O.P. ..... Lbs.	436,040	137,945
Ochres, ochrey earths, siennas and umbers ..... Lbs.	3,636,320	44,051
Oxides, fireproofs, rough stuffs, fillers. Lbs.	1,867,639	27,646
Paints and colours ground in spirits, and all spirit varnishes and lacquers... Galls	4,717	12,136
Paris green, dry ..... Lbs.	1,052,197	130,803
Putty ..... Lbs.	586,056	13,482
Oilcloth:—		
Total, oil cloth	.....	2,548,752
Mattresses, hair, spring and other	.....	17,746

	Quantity.	Value.
Soap:—		
Castile ..... Lbs.	2,889,836	$175,629
Common or laundry ..... Lbs.	6,910,305	386,190
Common, soft and liquid ..... Lbs.	460,979	18,878
Harness soap ..... Lbs.	10,382	1,020
Pearline and other soap powders ..... Lbs.	2,511,614	138,444
Soap, N.O.P., including pumice, silver and mineral soap, sapolio and other like articles	.....	197,202
Toilet soap	.....	415,563
Starch, including farina, corn starch, etc.. Lbs.	2,841,792	108,206
Varnish, lacquers, japan, japan dryers, and oil finish, N.O.P. ..... Galls.	107,595	191,063
Vinegar:—		
Above strength of proof ..... Galls.	7,731	3,181
Of any strength, not exceeding strength of proof ..... Galls.	174,788	66,209
Wax:—		
Beeswax ..... Lbs.	116,173	36,255
Paraffine ..... Lbs.	1,689,750	83,801
Sealing ..... Lbs.	131,765	20,728
Webbing, elastic, over one inch wide.....	.....	342,758
Window cornices and cornice poles of all kinds	.....	24,929
Window shades cut to size or hemmed or mounted on rollers, N.O.P., and window shade cloth in the piece ..... Sq. yds.	483,642	63,327
Window shade or blind rollers	.....	26,586

A WORD TO BUILDERS

You need not look abroad for the manufactured goods you need. As builders, build up your own country by buying these goods at home. Just now you are buying them abroad. Help to keep 771 clay, glass and stone factories and 17,699 workers busy by buying the following goods in Canada:

	Quantity.	Value.
Asphaltum or Asphalt, solid ..... Cwt.	1,043,951	$847,162
Bricks:—		
Bath	.....	1,650
Building ..... M.	85,943	809,368
Fire	.....	1,000,516
Paving ..... M.	12,043	159,854
Clay manufactures, N.O.P.	.....	814,757
Drain pipes, sewer pipes, and earthenware fittings therefor, chimney linings or vents, chimney tops and inverted blocks, glazed or unglazed	.....	513,520
Drain tiles, not glazed	.....	4,453
Lime ..... Bbls.	360,243	225,444
Flagstone, granite, rough, sand stone, and all building stone, not hammered, sawn or chiselled ..... Tons	.....	123,691
Flagstone, all other building stone, sawn or dressed ..... Tons.	.....	488,066
Granite, sawn only ..... Tons.	.....	24,636
Granite, manufactures of, N.O.P.	.....	185,531
Grindstones, not mounted, and not less than 36 inches in diameter	.....	96,173
Gypsum, crude ..... Tons	4,179	18,994
Lithographic stones, not engraved	.....	7,307
Manufactures of stone, N.O.P.	.....	51,238
Ornamental granite, marble, etc., unwrought (exports)	.....	.....
Ornamental granite, marble, etc., wrought (exports)	.....	.....
Paving blocks	.....	63,949

	Quantity.	Value.
Wood, unmanufactured:—		
Laths ..... M.	81,017	$178,225
Sawed, split or cut boards, planks and other lumber when not further manufactured than dressed on one side only. M. ft.	382,963	6,089,548
Sawed boards, planks, deals, planed or dressed on one side or both sides, when the edges thereof are jointed or tongued and grooved ..... M. ft.	60,773	925,764
Shingles ..... M.	143,965	277,551
Timber, hewn or sawed, squared or sided or creosoted	.....	800,560
Veneers of oak, rosewood, mahogany, Spanish cedar and walnut, not over 3-32 of an inch in thickness	.....	291,680
Veneers of wood, N.O.P., not over 3-32 of an inch in thickness	.....	62,620
Cement:—		
Portland, hydraulic or water-lime ... Cwt.	4,958,814	1,955,177
Other cement, N.O.P., and manufactures of, N.O.P.	.....	10,680
Total cement	.....	1,965,857
Marble and manufactures of:—		
Marble, sawn or sand rubbed, not polished	.....	239,678
Rough, not hammered or chiselled	.....	61,009
Manufactures of, N.O.P.	.....	210,222
Slate and manufactures of:—		
Mantles	.....	.....
Roofing slate ..... Squares	21,457	95,222

CAN'T CANADIANS FEED THEMSELVES?

In the old days, Canadian Indians used to be able to provide themselves with all necessary food in their own country. But Canadians of the present day will not. The 6,985 food product factories of Canada are capitalized at $133,044,523. They pay $14,492,568 annually in salaries and wages. They give employment to 52,730 people. They produce annually goods worth $245, 669,321. Why don't you buy from them instead of importing the following articles which are made in Canada? Abolish the bread lines by buying them in Canada.

	Quantity.	Value.
Ale and beer	2,033,692	$1,347,261
Ale, ginger	.....	33,977
Baking powder ..... Lbs.	667,904	179,341
Butter ..... Lbs.	7,989,269	2,081,989
Cheese ..... Lbs.	1,495,758	302,153
Eggs ..... Doz.	13,240,111	2,783,665
Lard ..... Lbs.	12,159,881	1,354,442
Lard compound and similar substances, cot-		
Cocoa paste or liquor and chocolate paste or liquor, not sweetened, in blocks or cakes, and cocoa butter ..... Lbs.	1,435,064	378,999
Cocoa paste or liquor, and chocolate paste or liquor, sweetened, in blocks or cakes, not less than 2 lbs. in weight ..... Lbs.	413,075	88,350
Cocoa or chocolate, preparations of, in powdered form ..... Lbs.	1,237,029	289,182
Cocoa or chocolate, preparations of, N.O.P. ..... Lbs.	1,454,059	300,672

	Quantity.	Value.
Cocoanut, desiccated, sweetened or not.. Lbs.	731,897	$67,286
Chicory, kiln-dried, roasted or ground.. Lbs.	601,799	34,142
Coffee, condensed with milk ..... Lbs.	4,552	634
Coffee, extract of, N.O.P., or substitutes therefor of all kinds ..... Lbs	238,031	37,755
Coffee, roasted or ground, when not imported direct from country of growth and production ..... Lbs.	435,461	109,160
Coffee, roasted or ground, and all imitations thereof and substitutes therefor, including acorn nuts, N.O.P. ..... Lbs.	317,619	79,451
Fish:—		
Anchovies and sardines packed in oil or otherwise, in tin boxes weighing over 20 ozs. and not over 36 ozs. ..... Boxes	12,053	962
Anchovies and sardines packed in oil or otherwise, in tin boxes weighing 8 ozs. or less	7,070,175	391,740

	Quantity.	Value.
Cod, haddock, ling and pollock, dry salted or smoked	394,524	$21,870
Fish, prepared or preserved, N.O.P. ... Lbs.	1,723,408	175,033
Lobster, canned, N.O.P. ... Lbs.	1,878	442
Mackerel, pickled ... Lbs.	23,971	1,466
Oysters, canned, in cans not over one pint ... Cans	550,514	50,807
Oysters, canned, in cans over one pint and not over one quart ... Cans	9,844	4,902
Oysters, canned, in cans exceeding one quart ... Qts.	2,268	1,202
Oysters, prepared or preserved, N.O.P. Lbs.	51,987	4,919
Glucose or grape sugar, glucose syrup and corn syrup, or any syrup containing any admixture thereof ... Lbs.	7,773,437	183,343
Maple syrup ... Lbs.	24,634	2,719
Maple sugar ... Lbs.		
Sugar, above No. 16 D.S. in colour and all refined sugars testing not more than 88 degrees by the polariscope ... Lbs.	19,996,511	729,481
Sugar candy and confectionery of all kinds, including sweetened gums, candied peel, candied popcorn, candied fruit, candied nuts, flavouring powders, custard powders, jelly powders, sweet-meats, sweetened breads, cakes, pies, puddings, and all other confections containing sugar ... Lbs.	10,785,514	1,541,485
Flour and meal—		
Buckwheat meal and flour ... Cwt..	2,751	9,615
Corn meal ... Bbls.	55,754	176,804
Oatmeal and rolled oats ... Lbs.	95,274	3,347
Rye flour ... Bbls.	5,470	19,451
Wheat flour ... Bbls	59,081	267,917
Hominy, cracked, evaporated or dried corn	.....	11,641
Malt flour, containing not less than 50 p.c. of malt ... Lbs.	119,293	3,946
Malt flour, containing less than 50 p.c. in weight of malt	13,319	1,105
Malt, whole, crushed or ground ... Lbs.	4,832,432	112,053
Barley, pot, pearl, rolled, roasted or ground ... Lbs	572,436	32,244
Biscuits, sweetened ... Lbs.	1,599,528	209,710
Biscuits, not sweetened ... Lbs.	833,877	66,858
Cereal foods, prepared, N.O.P.	.....	10,629
Cereal foods, prepared, in packages, not exceeding 25 lbs. weight ... Lbs.	.....	165,912
Macaroni and vermicelli ... Lbs.	8,035,873	392,890
Rice, cleaned	13,348,658	390,279
Rice and sago flour	1,145,592	28,715
Fruits and nuts:—		
Dried:—		
Fruits:—		
Apples ... Lbs.	339,758	16,520
Canned or preserved fruits, jellies, jams, etc.:—		
Fruits in air-tight cans or other air-tight packages ... Lbs.	12,559,522	785,782
Fruit rind or peel of citrons, lemons and oranges, in brine	.....	30
Fruits preserved in brandy or preserved in other spirits, and containing not more than 40 per cent. of proof spirits, etc. ... Galls.	1,044	1,993
Fruits preserved in brandy, etc., etc., containing more than 40 per cent. of proof spirits ... Galls.	17	53
Jellies, jams and preserves, N.O.P. and condensed mince meat ... Lbs.	8,826,833	805,242
Bacon ... Lbs.	13,554,394	1,946,278
Hams, including shoulders and sides for import ... Lbs.		
Beef, salted in barrels ... Lbs.	1,018,857	69,057
Canned meats, canned poultry and game. Lbs.	2,228,484	393,174
Dried or smoked meats, or preserved in any other way than salted or pickled, N.O.P. ... Lbs.	1,809,246	277,304
Extracts of meats and fluid beef, not medicated, and soups of all kinds	.....	$327,173
Pork, barrelled in brine ... Lbs.	9,514,863	941,917
Other meats, fresh ... Lbs.	1,297,120	151,573
Other meats, salted, N.O.P. ... Lbs.	1,062,143	143,712
Lime juice and fruit juice fortified with or containing not more than 25 p.c. of proof spirits ... Galls.	917	1,398
Lime juice and other fruit syrups and fruit juices, N.O.P. ... Galls.	114,292	122,704
Lime juice containing more than 25 p.c. of proof spirits ... Galls.	503	3,439
Milk and cream, condensed ... Lbs.	261,555	21,171
Milk food and other similar preparations...	.....	274,949
Sweet cream (exports)	.....	.....
Mineral, aerated waters, N.O.P.	.....	272,985
Mustard, ground ... Lbs.	948,042	189,544
Mustard, French, liquid	.....	26,890
Pickles in bottles, jars or similar vessels ... Galls.	299,085	270,436
Pickles in bulk ... Galls.	135,874	64,735
Sauces and catsups, in bottles ... Galls.	258,684	299,989
Sauces and catsups, in bulk ... Galls.	60,433	19,503
Salmon, pickled or salted ... Lbs.	7,084	480
Salmon, smoked ... Lbs.	9,870	1,634
Salmon canned, prepared or preserved, N.O.P. ... Lbs.	558,159	78,947
Salt, in bulk, N.O.P. ... Lbs.	42,990,700	63,848
Salt, N.O.P., in bags, barrels and other packages ... Lbs.	17,884,200	73,492
Salt, imported from the United Kingdom or any British possession, or imported for the use of the sea or gulf fisheries ... Lbs..	218,852,300	362,755
Sea-fish, other, pickled ... Lbs.	16,775	513
Seafish, preserved, N.O.P. ... Lbs.	341,929	38,435
Seafish, preserved, in cans ... Lbs.	162,942	35,555
Spices:—		
Ginger and spices, N.O.P., ground ... Lbs.	119,030	21,701
Nutmegs and mace, ground ... Lbs.	6,155	2,001
Spirits:—		
Alcohol, amyl or fusel oil, or any substance known as potato spirit or potato oil ... Galls.	179	169
Brandy, including artificial brandy and imitations of brandy, N.O.P. ... Galls.	565,555	1,140,290
Cordials and liqueurs of all kinds, N.O.P., mescal, pulque, rum schrub, schiedam and other schnapps; tafia, angostura and similar alcoholic bitters or beverages ... Galls.	90,877	217,477
Ethyl alcohol, to be denatured for use in the arts and industries, and for fuel, light and power ... Galls.	.....	.....
Ethyl, or the substance known as alcohol, hydrated oxide of ethyl or spirits of wine ... Galls.	186	134
Gin of all kinds, N.O.P. ... Galls.	1,156,893	828,473
Methyl alcohol, wood alcohol, wood naptha, pyroxolic spirits, or any substance known as wood spirits, or methylated spirits ... Galls.	450	286
Methyl alcohol, to be used in denaturing alcohol, and for fuel, light and power ... Galls.	.....	.....
Rum ... Galls.	221,841	122,448
Whiskey ... Galls.	1,469,148	2,696,139
Other spirituous or alcoholic liquors, N.O.P. ... Galls.	16,437	19,861
Wines, non-sparkling:—		
Total wines, non-sparkling ... Galls.	942,521	840,447
Yeast cakes ... Lbs.	547	66
Yeast, compressed, in packages weighing less than 50 pounds ... Lbs.	26,092	6,533
Yeast, compressed, in bulk or mass of not less than 50 pounds ... Lbs	1,195,665	287,420

CANNOT CANADIANS CLOTHE THEMSELVES?

There are 1,444 textile factories in Canada, employing 72,672 workers, who receive $26,703,806 in wages. They produce annually $245,669,321 worth of goods. Yet notice in the following lists the amount of textiles we import. Why not buy our wearing apparel in Canada during the war, or, at any rate, in the British Empire? Look over this list of goods which are imported into Canada. Similar articles are made in Canada. Why not buy these "made-in-Canada" articles? If you do you will help to clothe our own workers during the war.

	Quantity.	Value.
Boots and shoes, slippers and insoles of leather, N.O.P.	.....	$4,008,505
Boots and shoes, pegged or wire fastened, with unstitched soles, close edged...	.....	102,987
Boots, shoes, slippers and insoles of all kinds, except rubber and leather	.....	250,925
Braces or suspenders and finished parts of..	.....	89,192
Collars ... Doz.	325,870	322,097
Cuffs ... Pairs	22,053	2,761
Total collars and cuffs	.....	324,858
Combs	.....	238,147
Corsets of all kinds	.....	559,832
Corset clasps, busks, blanks and steels, and covered corset wires, cut to length, tipped or untipped, reed, rattan and horn covered	.....	17,552
Costumes and scenery, theatrical	.....	$5,329
Batts, batting and sheet wadding ... Lbs.	300,626	33,701
Clothing:—		
Blouses and shirtwaists	.....	232,067
Shawls	.....	2,583
Shirts ... Doz.	120,034	655,976
Socks and stockings ... Doz. pairs	869,514	1,120,535
Undershirts and drawers	.....	115,440
Other clothing, N.O.P.	.....	3,044,538
Embroideries, white and cream colored	.....	1,549,711
Fabrics:—		
Belting of all kinds except leather or rubber	.....	515,206
Bobbinet (white cotton), plain, in the web ... Yds.	469,795	55,895
Church vestments of any material	.....	56,963

	Quantity.	Value.
Clothing:—		
Blouses and shirtwaists	.....	$90,140
Shawls	.....	13,647
Shirts ..... Doz.	814	13,794
Socks and stockings ..... Doz. prs.	73,383	280,940
Undershirts and drawers	.....	4,304
Other, N.O.P.	.....	1,021,134
Fabrics:—		
Other, N.O.P.	.....	5,762,223
Handkerchiefs	.....	114,231
Other manufactures of, N.O.P., or of which silk is the component part of chief value, N.O.P.	.....	568,090
Clothing:—		
Blouses and shirt waists	.....	301
Shirts ..... Doz.	622	4,714
Other, N.O.P.	.....	18,713
Embroideries and lace of linen, white and cream colored	.....	3,496
Fabrics:—		
Brown or bleached ..... Yds.	1,459,007	175,201
Canvas for ships' sails	.....	15,853
Printed, dyed or colored, N.O.P. ... Yds.	353,791	45,198
Tailors' hollands of linen and towelling in the web ..... Yds.	2,971,903	231,657
Unbleached, N.O.P. ..... Yds.	4,916,204	457,573
Handkerchiefs	.....	303,517
Horse clothing, shaped or otherwise manufactured	.....	3,254
Tapestry, jute	.....	683
Towels	.....	235,697
Manufactures of cotton or of which cotton is component material of chief value, N.O.P.	.....	1,131,719
Total cotton and manufactures of ...	.....	37,951,599
Crapes, black mourning	.....	12,239
Duck, gray or white, N.O.P., weighing over 8 ozs. per square yard ..... Yds.	4,129,164	1,131,705
Duck, cotton or linen, seamless, in circular form, for the manufacture of hose pipe	.....	102,102
Gray, unbleached ..... Yds.	16,472,152	1,061,683
Jeans, coutiles and sateens, imported by corset and dress stay manufacturers.. ..... Yds.	2,581,179	301,365
Printed, dyed or colored, N.O.P.. Yds.	70,995,736	7,042,249
Tailors' hollands of cotton and towellings in the web ..... Yds.	3,584,244	267,492
Uncolored cotton fabrics, bleached, viz.: Scrims and window scrims, cambric cloths, muslin apron checks, brilliants, cords, piques, diapers, lenos, mosquito nettings; Swiss jaconet and cambric muslins, and plain, striped or checked lawns ..... Yds.	545,670	37,851
Embroideries, N.O.P.	.....	143,701
Fancy goods, viz.:		
Alabaster, spar, amber, terra cotta or composition ornaments	.....	46,705
Bead ornaments	.....	22,738
Boxes, fancy, ornamental cases and writing desks, etc.	.....	361,506
Braids, cords, fringes, tassels, N.O.P.	.....	656,241
Cases for jewellery, watches, silverware, plated ware and cutlery	.....	59,299
Fans	.....	10,740
Feathers, fruits, grains and leaves, artificial, suitable for ornamenting hats ...	.....	782,576
Feathers, fancy, undressed	.....	228,560
Feathers, fancy, N.O.P., and manufactures of feathers, N.OP.	.....	406,920
Feathers, ostrich and vulture, dressed ...	.....	71,620
Ivory or bone dice, draughts, chessmen, etc.	.....	282
Lace, N.O.P., lace collars and all manufactures of lace; nets and nettings of cotton, linen, silk or other material, N.O.P.	.....	1,340,254
Tinsel thread and tinsel wire for the manufacture of braids, cords, tassels, ribbons or trimmings	.....	3,844
Toys and dolls of all kinds	.....	939,678
Total fancy goods	.....	5,000,874
Fashion plate, tailors', milliners' and mantle makers'	.....	52,672
Feathers, bed and other, N.O.P.:—		
Dressed	.....	124,649
Undressed	.....	65,740
Fur skins, wholly or partially dressed, N.O.P.	.....	1,362,825
Hats, caps, muffs, tippets, capes, coats, cloaks and other mfrs. of fur, N.O.P	.....	793,051
Glass and mfrs. of:—		
Glass balls, and cut, pressed or moulded crystal glass tableware, blown glass table ware, and other cut glass ware	.....	676,725
Glass carboys or demijohns, bottles, decanters, flasks, jars, and phials	.....	563,436
Glass in sheets and bent plate glass, N.O.P.	.....	137,252
Lamp chimneys, glass shades or globes...	.....	424,738
Ornamental, figured and enamelled, colored glass and memorial or other ornamental window glass, N.O.P.	.....	48,092
Plate glass, bevelled, N.O.P. ..... Sq. ft.	10,271	$2,737
Silvered glass, bevelled or not, framed or not framed	.....	163,681
Stained or ornamental glass windows	.....	21,114
Other articles of glass, not plate or sheet, designed to be cut or mounted, and manufactures of glass, N.O.P.	.....	454,205
Gloves and mitts of all kinds	.....	2,793,606
Glue, glue stock and mucilage:—		
Glue, liquid	.....	82,564
Glue, powdered or sheet ..... Lbs.	3,030,061	244,214
Mucilage and adhesive paste	.....	36,096
Straw, Manufacturers of, N.O.P.	.....	22,831
Hair, and manufactures of:—		
Braids, chains or cords	.....	504
Cloth of all kinds	.....	53,528
Curled or dyed hair, N.O.P. ..... Lbs.	432,440	99,961
Hats, caps and bonnets, viz.:—		
Beaver, silk or felt	.....	2,298,719
Hat, cap and bonnet shapes, and hat and bonnet crowns	.....	136,824
Gutta percha and India rubber and manufactures of:—		
Belting	.....	124,275
Boots and shoes	.....	91,744
Clothing and clothing made waterproof with India rubber	.....	1,610,381
Hose, including cotton or linen lined with rubber	.....	145,224
Packing, mats and matting	.....	102,023
Regalia and badges	.....	61,670
Ribbons of all kinds and materials	.....	1,667,934
Stockinettes for the manufacture of rubber boots and shoes	.....	123,270
Velvets, velveteens, and Plush, N.O.P.. Yds.	3,430,226	996,310
White or bleached ..... Yds.	33,954,134	3,003,130
Handkerchiefs	.....	832,652
Lace, white and cream colored	.....	1,685,532
Lampwick	.....	24,728
Raw cotton or cotton wool ..... Lbs.	77,457,809	8,735,191
Sheets, bed quilts, pillow cases and damask in the piece, including uncolored table cloths or napkins	.....	1,109,557
Tape, dyed or colored	.....	13,123
Tape, not dyed or colored	.....	52,765
Thread:—		
Crochet and knitting ..... Lbs.	85,841	39,964
Sewing, in hanks ..... Lbs.	338,102	193,685
Sewing, on spools ..... Lbs.	.....	506,605
Other thread, N.O.P. ..... Lbs.	184,904	102,264
Umbrellas, parasols and sunshades of all kinds and materials	.....	127,208
Towels	.....	472,801
Yarn:—		
Knitting, hosiery or other cotton yarn, dyed or not, N.O.P. ..... Lbs.	755,693	207,008
No. 40, and finer ..... Lbs.	2,707,983	1,231,953
Polished or glazed, when imported by manufacturers of shoe laces ..... Lbs.	3,744	1,435
Warps	.....	6,099
Waste or shoddy from cotton, woollen or other fabrics or from yarn or thread, machined, garnetted or prepared for use. Lbs.	7,395,896	443,043
Watches	.....	126,499
Watch cases and parts thereof, finished or unfinished	.....	205,597
Wool and manufactures of:—		
Bed comforters ..... No.	1,097	3,674
Blankets composed wholly of pure wool Lbs	317,533	141,342
Carpets, mats, rugs, etc:—		
Axminster, including Abusson, Savonerie and Moquette ..... Yds.	315,406	382,312
Brussels, including Wilton and Teprac.. ..... Yds.	463,358	435,863
Ingrain, 2 and 3 ply, all wool or union ..... Yds.	77,546	68,991
Mats and rugs, including hearth sizes 30 sq. ft and smaller, wool, N.O.P.	.....	899,102
Tapestry, including drum printed or machine printed, and velvet ..... Yds	1,090,733	645,541
Whole, including tufted, hand made or Oriental, Turkish, Persian, Japanese, Indian or Smyrna ..... Sq. yds	495,563	555,939
Clothing:—		
Knitted goods, including knitted underwear, N.O.P.	.....	1,507,032
Outside garments for women and children	.....	528,130
Shawls	.....	131,576
Shirts ..... Doz.	7,130	61,652
Socks and stockings ..... Doz. prs.	872,885	1,664,325
Undershirts and drawers, N.O.P.	.....	82,567
Other clothing, N.O.P.	.....	2,418,111
Fabrics:—		
Cassimeres, cloths and doeskins. .. Yds.	5,068,694	3,221,612
Coatings and overcoatings ..... Yds.	1,484,387	1,216,752
Felt cloth, N.O.P. ..... Yds.	56,002	31,920
Flannels, plain, not fancy ..... Yds.	714,697	126,141
Tweeds ..... Yds.	2,599,083	1,473,463
Other fabrics and manufactures, N.O.P.	.....	10,435,013
Felt, pressed, of all kinds, not filled or covered by or with any woven fabric. Lbs.	1,382,333	389,382
Railway rugs	.....	64,141

HOW MUCH IRON, STEEL AND OTHER METALS CAN WE BUY IN CANADA?

Our heaviest imports are iron and steel products, and metals and metal products, other than iron and steel. It is quite true that much of this material must be imported because it is not made in Canada, but it is equally true that great quantities are bought abroad when they might be bought at home. Manufacturers are the chief sinners in this respect, and they must reform if they expect the public to support a "made-in-Canada" campaign. One can't expect John Smith to ask the corner hardware store for a "made-in-Canada" axe or saw if he knows that his neighbor, the manufacturer, is placing abroad large orders for the iron, steel and other metal products which he requires for his factory processes. The manufacturer must practise what he preaches. Let the manufacturers and all other buyers consult these lists to see if they cannot substitute these imports from other countries with goods made in Canada.

We have 824 factories devoted to the manufacturing of iron and steel products. They employ 45,558 workers, and pay them $25,792,388 in wages. We have also 341 factories which manufacture metal and metal products, other than iron and steel. These give work to 17,502 employees, giving them annually $9,776,371 in wages. Thousands of these employees are now idle because the factories do not get the orders which we send abroad. The following list of our imports shows how we send our money away from Canada and how we take the bread out of the mouths of our workers:

	Quantity.	Value.
Abrasives, artificial, in bulk, crushed or ground, when imported for use in the manufacture of abrasive wheels and polishing composition	.....	$6,037
Anchors ..... Cwt.	7,168	30,288
Angles, beams, channels and other rolled shapes of iron or steel, not punched, drilled or further manufactured than rolled, weighing not less than 35 lbs. per lineal yard, not being square, flat, oval or round shapes, and not being railway bars or rails ..... Cwt.	4,013,570	5,319,456
Angles, beams, channels, girders, tees and other rolled shapes or sections, not punched, drilled or further manufactured than rolled, N.O.P. ..... Cwt.	1,789,248	2,510,757
Axles and axle parts, N.O.P., and axle blanks and parts thereof of iron or steel, for railway, tramway or other vehicles ..... Cwt.	283,061	774,677
Bar iron or steel, rolled, whether in coils, bundles, rods or bars, comprising rounds, ovals, squares and flats, N.O.P. ..... Cwt.	2,704,621	3,916,390
Billets of iron or steel, weighing not less than 60 lbs. per lineal yard ..... Cwt.	1,657,017	1,641,909
Billets of steel, N.O.P. ..... Cwt.	43,498	48,600
Bridges or parts thereof; structural work, columns, shapes or sections, drilled, punched or in any further stage of manufacture than as rolled or cast, N.O.P. ..... Cwt.	363,422	910,052
Bridges and tunnels, crossing the boundary, materials to be used in Canada in the construction of	.....	.....
Butts and hinges, N.O.P.	.....	170,238
Cart or wagon skeins or boxes .... Lbs.	453,778	17,240
Castings, N.O.P.	.....	1,774,296
Chains, coil chains, chain links and chain shackles, of iron or steel, 5-16 of an inch in diam. and over .... Cwt.	74,394	220,896
Chain, malleable sprocket or link belting	.....	273,697
Chains, N.O.P.	.....	179,024
Chains, rods for the manufacture of, not less than 5-16 inch in diameter Cwt.	39,048	49,624
Cream separators and steel bowls for..	.....	467,849
Cutlery:—		
Knives and forks of steel, plated or not, N.O.P.	.....	361,686
Other cutlery, N.O.P.	.....	899,528
Engines, boilers, etc. (vide under "Machinery"):—		
Boilers, steam ..... No.	1,118	368,565
Boilers, N.O.P. ..... No.	6,599	397,371
Fire engines ..... No.	25	35,520
Gasoline engines ..... No.	27,255	3,413,595
Locomotives for railways ..... No.	202	787,411
Locomotives, parts of	.....	128,828
Motor cars for railways and tramways ..... No.	155	348,505
Steam engines ..... No.	483	475,980
Fire extinguishing machines, including sprinklers for fire protection	.....	136,775
Forgings of iron or steel of whatever shape and size or in whatever stage of manufacture, N.O.P.; and steel shafting, turned, compressed, or polished, and hammered, drawn or cold rolled iron or steel bars or shapes, N.O.P. ..... Lbs.	6,833,866	339,119
Hardware, viz.: builders' cabinet-makers', upholsterers', harness-makers', saddlers', and carriage hardware, including curry combs, N.O.P.	.....	956,597
Hoop, band, scroll or strip of iron or steel, rolled, 12 inches or less in width, No. 13 gauge and thicker, N.O.P. .Cwt.	158,927	255,828
Horse, mule or ox shoes	.....	31,536
Ingots, cogged ingots, blooms, slabs, puddled bars, and loops or other forms, N.O.P., less finished than iron or steel bars, but more adanced than pig iron, except castings ..... Cwt.	34,405	$42,227
Locks of all kinds	.....	669,185
Machinery:—		
Briquette-making machines	.....	29,276
Cranes and derricks ..... No.	285	744,711
Emery in bulk, crushed or ground	.....	48,469
Emery and carborundum wheels and manufactures of emery or carborundum	.....	141,017
Electric apparatus:—		
Carbons, electric light, and carbon points of all kinds, N.O.P. ..... M.	5,152	71,067
Carbons over six inches in circumference ..... No.	1,613,225	307,094
Electric apparatus, N.O.P., insulators of all kinds, etc., electric and galvanic batteries, telephone and telegraph instruments	.....	6,996,037
Electric motors, generators, dynamos and sockets	.....	1,583,907
Incandescent lamp bulbs and glass tubing for use in the manufacture of incandescent lamps and mantle stocking for gas light	.....	146,435
Total electric apparatus	.....	9,104,540
Foundry facings of all kinds	.....	27,754
Galvanized, Nos. 9, 12 and 13 gauge ..... Cwt.	823,397	1,414,429
Single or several, covered, including cable ..... Lbs.	.....	1,219,534
Wire cloth, or woven wire and netting of iron and steel ..... Lbs.	3,541,132	196,374
Wire rope, stranded or twisted wire, clothes lines, picture or other twisted wire, and wire cables, N.O.P. ..... Cwt.	96,634	619,062
Wire of all kinds, N.O.P. ..... Cwt.	118,150	324,097
Wire bale ties ..... Bundles	7,848	4,850
Wire screens, doors and windows	.....	42,650
Wire rods, rolled, round, in the coil not over ⅜ in. in diameter, for making wire in the coil ..... Cwt.	1,838,386	2,144,405
Other manufactures, articles or wares of iron or steel, or of which iron or steel (or either) are the component materials of chief value, N.O.P.	.....	11,765,265
Lead and manufactures of:—		
Bars and in sheets ..... Cwt.	20,237	98,935
Pipe ..... Lbs.	672,862	30,536
Shot and bullets ..... Lbs.	532,135	26,000
Other manufactures of, N.O.P.	.....	148,141
Tinware, japanned or not, and all manufactures of tin, N.O.P.	.....	575,595
Zinc and manufactures of:—		
Spelter ..... Cwt.	107,845	630,564
Other manufactures of, N.O.P.	.....	54,616
Aluminum in ingots, blocks or bars, strips, sheets or plates ..... Lbs.	2,333,873	403,700
Aluminum, manufactures of, N.O.P.	.....	123,011
Anodes of nickel, zinc, copper, gold and silver	.....	19,749
Asbestos in any form other than crude, and all manufactures of	.....	497,160
Babbit metal in blocks, bars, plates and sheets	.....	43,258
Bird, parrot, squirrel and rat cages of wire and metal parts thereof	.....	8,321
Black lead	.....	9,448
Britannia metal, manufactures of, not plated	.....	37,295
Buckles of iron or steel, brass or copper of all kinds, N.O.P. (not being jewellery)	.....	186,631
Furniture springs	.....	33,577

	Quantity.	Value.
Gas, coal or other oil and electric light fixtures or parts thereof of metal, including lava, or other tips, burners, collars, galleries, shades and shade-holders	.....	$780,728
Gas meters and finished parts thereof ...	.....	132,126
German, Nevada and nickel silver, manufactures of, not plated	.....	86,989
Ingot moulds, glass moulds of metal	.....	253,520
Lamps, side lights and head lights, lanterns and chandeliers	.....	1,734,597
Nickel-plated ware, N.O.P.	.....	1,452,470
Pins, N.O.P.	.....	129,837
Plumbago, ground and manufactures of, N.O.P.	.....	57,780
Screws of brass or other metal except iron or steel, N.O.P.	.....	26,332
Stereotypes, electrotypes and celluloids of newspaper columns in any language other than French and English, and of books, and bases, and matrices, and copper shells for the same, whether composed wholly or in part of metal or celluloid .....Sq. in.	726,159	15,742
Stereotypes, electrotypes and celluloids for almanacs, calendars, illustrated pamphlets, newspaper or other advertisements, N.O.P., and matrices or copper shells for such stereotypes, electrotypes and celluloids .....Sq. in.	1,271,990	79,698
Stereotypes, electrotypes and celluloids and bases for the same composed wholly or partly of metal or celluloid, N.O.P., and copper shells for such stereotypes, electrotypes and celluloids .....Sq. in.	352,530	15,205
Type for printing, including chases and quoins and slugs of all kinds.....	.....	197,969
Wire of all kinds, except iron or steel, N.O.P.	260,785	33,549
Metals and minerals and manufactures of:—		
Brass and manufactures of:—		
Bars and rods in coils or otherwise, in lengths not less than 6 feet	.. ..	20,782
Bars or rods not less than 6 ft. in length, and brass in strips, sheets or plates not polished, etc., for use in Canadian manufactures .....Cwt.	54,499	934,109
Blocks, ingots or pigs .....Cwt.	19,922	294,698
Nails, tacks, rivets and burrs or washers	.....	9,687
Pumps	.....	19,106
Strips, sheets or plates, not polished, planished or coated	.....	19,085
Wire cloth, woven wire of brass, N.O.P.	.....	99,439
Wire, plain ..... Lbs.	411,838	74,069
Other manufactures of, N.O.P.	.....	2,360,529
Copper and manufactures of:—		
Nails, tacks, rivets and burrs or washers	.....	4,600
Wire cloth or woven wire of copper	.....	7,239
Wire, plain, tinned or plated .....Lbs.	466,802	105,515
Other manufactures of, N.O.P.	.....	313,703
Gold and silver and manufactures of:—		
Electro-plated ware and gilt ware, N.O.P.	.....	712,629
Gold, silver and aluminium leaf and Dutch or schlag metal leaf	.....	73,229
Sterling or other silverware, N.O.P.	.....	286,308
Manufactures of gold and silver, N.O.P.	.....	105,612
Iron and steel and manufactures of:—		
Picture and photograph frames of any material	.....	167,035
Plates, engraved on wood, steel or other metal and transfers taken from the same, engravers' plates of steel, or other metal polished for engraving thereon	.....	79,574
Pocket books, portfolios, purses, reticules, satchels, card cases, fly books and musical instrument cases	.....	662,897
Polish or composition, knife and other,N.O.P.	.....	219,144
Pulleys, belt, of all kinds, for power transmission	.....	103,127
Ore crushers and rock crushers, stamp mills, Cornish and belted rolls, rock drills, air compressors, cranes, derricks and percussion coal cutters ..	.....	451,377
Portable machinery, N.O.P., and parts	.....	132,546
Printing presses, N.O.P.	.....	598,302
Saw and planing mills, portable ..No.	13	12,366
Sewing machines .....No.	19,556	430,066
Sewing machines, parts of	.....	130,354
Steam shovels .....No.	102	513,720
Type-casting and typesetting machines and parts thereof, adapted for use in printing offices .....No.	.....	438,632
Typewriting machines .....No.	18,146	$1,141,903
Washing machines .....No.	11,959	105,828
Windmills and complete parts thereof .....No.	994	35,011
All machinery, composed wholly or in part of iron or steel, N.O.P., and iron or steel castings and iron or steel integral parts of machinery ..	.....	19,789,912
Nail rods, rolled, not over half an inch in diameter or width, for the manufacture of horseshoe nails .....Cwt.	23,542	53,067
Nails, brads, spikes and tacks of all kinds, N.O.P. .....Lbs.	1,179,059	59,456
Nails and spikes, cut (ordinary builders') .....Lbs.	1,259,400	24,331
Nails, spikes, composition and sheathing nails .....Lbs.	557,688	19,194
Nails, wire, of all kinds, N.O.P. ...Lbs.	4,223,400	124,899
Nuts, washers, rivets and bolts, with or without threads, and nut, bolt and hinge blanks and T and strap hinges of all kinds, N.O.P. .....Lbs.	8,845,000	341,631
Pig iron .....Lbs.	291,813	3,813,034
Pig iron (charcoal) .....Lbs.	91	1,183
Pipe, cast iron .....Cwt.	819,745	1,033,426
Pipe, fittings for .....Lbs.	.....	1,265,091
Pipe, wooden, wire bound, N.O.P.	.....	757
Plates or sheets, rolled, sheared or unsheared, and skelp iron or steel sheared or rolled in grooves, N.O.P.	842,333	1,225,605
Pumps, hand, N.O.P. .....No.	34,296	148,487
Rails for railways and tramways Tons	150,538	3,867,833
Railway fish plates .....Tons	2,084	87,968
Railway spikes .....Cwt.	155,841	241,254
Railway switches, frogs, crossings and intersections .....Cwt.	61,129	312,794
Railway tie-plates .....Tons	639	21,937
Rolls of chilled iron or steel .....Cwt.	2,866	7,335
Sad or smoothing, hatters' and tailor's irons	.....	15,996
Safes and doors for, and vaults	.....	247,068
Scales, balances and weighing beams and strength-testing machines	.....	189,823
Screws, iron and steel, commonly called wood screws, N.O.P., including lag or coach screws, plated or not, and machine or other screws, N.O.P....Gross	973,423	117,085
Shafting, round, steel, in bars not exceeding 2½ inches in diameter ..Cwt.	79,580	142,346
Sheets, corrugated, galvanized ....Cwt.	7,140	23,131
Sheets, corrugated, not galvanized..Cwt.	7,524	16,361
Skates, of all kinds, roller or other, and parts thereof .....Pairs	118,453	72,258
Springs, N.O.P., and parts thereof, of iron or steel, for railway, tramway or other vehicles	21,777	104,342
Stoves of all kinds, for coal, wood, oil, spirits or gas	.....	1,057,647
Tools and implements:—		
Adzes, cleavers, hatchets, wedges, sledges, hammers, crowbars, cant-dogs, track tools; picks, mattocks and eyes or poles for the same ...	.....	139,584
Axes .....Doz	13,807	72,127
Files and rasps, N.O.P.	.....	158,719
Saws	.....	163,200
Tools, hand, of all kinds, N.O.P.	.....	1,107,217
Tubes, rolled, seamless, not jointed or welded, not more than 1½ inch in diameter, N.O.P.	.....	35,847
Tubing or pipe of iron or steel, plain or galvanized, riveted, corrugated, or otherwise specially manufactured, including lock joint pipe, N.O.P.	.....	1,014,005
Tubing, wrought iron or steel, seamless, plain or galvanized, threaded and coupled or not, 4 inches or less in diameter, N.O.P.	.....	486,067
Tubing, wrought iron or steel, seamless, plain or galvanized, threaded and coupled or not, over 4 inches in diameter, N.O.P.	.....	1,586,452
Ware—Agate, granite or enamelled iron or steel ware	.....	311,832
Ware—Iron or steel hollow-ware, plain, black or coated, N.O.P., and aluminium kitchen or household holloware N.O.P.	.....	182,556

GERMANY IS NOT THE ONLY COUNTRY MAKING CHEMICALS

Canada has 178 chemical factories, employing 5,274 people and paying them annually $2,393,971 in wages. Buy your chemicals at home. We import all of the following, although every article is now made in Canada:

Acids:—	Quantity.	Value.
Acetic and pyroligneous, N.O.P., not exceeding proof strength .....Gals.	1,092	$975
Acetic and pyroligneous in excess of the strength of proof .....Gals.	2,176	2,411
Acetic and pyroligneous, crude, of any strength not exceeding 30 per cent..Gals.	8,853	2,374
Acid phosphate, not medicinal .....Lbs.	1,936,822	$79,610
Mixed, N.O.P. .....Lbs.	235,321	7,453
Muriatic .....Lbs.	1,240,618	13,166
Nitric .....Lbs.	229,350	11,382
Oxalic .....Lbs.	397,859	21,906

	Quantity.	Value.
Sulphuric .....Lbs.	4,393,873	$29,884
Stearic .....Lbs.	318,152	30,259
Other acids, N.O.P. .....Lbs.	678,581	111,696
Arsenic, sulphide of .....Lbs.	555,931	26,601
Casein	.....	1,548
Celluloid, mfrs. of, N.O.P.	.....	83,815
Celluloid, xylonite or xyolite in sheets, lumps, blocks, rods or bars, not further manufactured than moulded or pressed	.....	32,426
	.....	126,526
Chloride of lime, and hypochloride of lime in packages of not less than 25 lbs.....Lbs.	11,571,432	101,757
Gelatine and isinglass .....Lbs.	594,427	144,881
Glycerine, crude, for the manufacture of refined glycerine .....Lbs.	1,284,542	159,174
Glycerine for the manufacture of explosives .....Lbs.	5,579,216	906,364
Glycerine, N.O.P. .....Lbs.	161,255	23,271
Medicinal, chemical and pharmaceutical preparations, including proprietary preparations (dry)	.....	1,094,617
Medicinal, chemical and pharmaceutical preparations, including proprietary preparations (all other)	.....	146,732
Medicinal, chemical and pharmaceutical preparations, including proprietary preparations (all other) non-alcoholic	.....	101,567
Caustic, in packages less than 25 lbs....Lbs.	137,185	7,938
Caustic, in packages not less than 25 lbs. .....Lbs.	15,835,631	294,874
Plaster of Paris, or gypsum, ground, not calcined .....Bbls.	55,739	22,939
Plaster of Paris, gypsum calcined and prepared wall plaster .....Cwt.	638,791	228,224
Talc, ground, bolted, or precipitated, not for toilet use .....Cwt.	5,573	6,421

	Quantity.	Value.
Perfumery, pomades, etc., viz.:—		
Hair oil, tooth and other powder, washes, pomatum, pastes, and all other perfume preparations, N.O.P., used for the hair, mouth or skin	.....	$446,277
Perfumes and perfumed spirits, bay rum, cologne and lavendar water, hair, tooth and skin washes, and other toilet preparations containing spirits of any kind, in bottles or flasks, containing not more than four ounces each .....Galls.	12,122	98,987
Perfumes and perfumed spirits, bay rum, cologne and lavendar water, hair, tooth and skin washes, and other toilet preparations containing spirits of any kind, in bottles, flasks, or other packages containing more than four ounces each .....Galls.	9,922	121,659
Photographic dry plates	.....	63,944
Sal .....Lbs.	10,102,636	63,710
Spirits and strong waters of any kind, mixed with any ingredients, and being known or designated as anodynes, elixirs, essences, extracts, lotions, tinctures or medicines, or ethereal and spirituous fruit essences, N.O.P. .....Galls.	6,665	56,447
Sulphuric ether, chloroform and solutions of peroxides of hydrogen .....Galls.	257,938	42,604
Surgical dressings, antiseptic, such as absorbent cotton, cotton wool, lint, lamb's wool, tow, jute, gauzes and oakum, prepared for use as surgical dressings, plain or medicated	.....	197,887

SELLING ANIMALS AND BUYING BACK THEIR SKINS

There is no profit in exporting animals and buying back their skins at fancy prices in the shape of leather goods. But we do it. Although we have 399 leather manufacturing establishments in Canada, which pay annually $9,644,403 to 22,742 employees. But we buy abroad the following articles and then wonder why we have unemployment in our cities and towns:

	Quantity.	Value.
Leather and manufactures of:—		
Belting Leather of all kinds .....Lbs.	579,785	$260,562
Calf, kid or goat, lamb and sheep skins, tanned .....Lbs.	144,089	72,429
Calf, kid or goat, lamb and sheep skins, dressed, waxed or glazed .....Lbs.	1,033,961	555,407
Glove leather, tanned or dressed, colored or uncolored, for use in the manufacture of gloves .....Lbs.	.....	829,687
Harness leather .....Lbs.	52,248	25,245
Japanned, patent or enamelled leather and Morocco leather, and leather in imitation of Morocco leather .....Lbs.	65,713	47,889
Skins for Morocco leather, tanned, but not further manufactured .....Lbs.	64,835	28,197
Sole leather .....Lbs.	749,681	157,949

	Quantity.	Value.
Upper leather, not dressed, waxed or glazed .....Lbs.	49,502	$22,221
Upper leather, including dongola, cordovan, kangaroo, alligator and all leather, dressed, waxed or glazed, or further finished than tanned, N.O.P., and chamois skins .....Lbs.	426,390	364,610
Other leather and skins, N.O.P.....Lbs.	624,467	270,806
Other leather dressed, waxed or glazed, etc., N.O.P. .....Lbs.	2,343,869	1,532,940
Manufactures of, viz.:—		
Belting .....Lbs.	.....	253,098
Harness and saddlery, including horse boots	.....	243,287
Other manufactures of leather and raw hide, N.O.P.	.....	819,153
Trunks, valises, hat-boxes carpet bags and tool bags	.....	154,827

SMOKERS---HELP TO KEEP CHIMNEYS SMOKING

Don't be offended if your tobacconist offers you a domestic cigar. Ask for Canadian tobacco. You now buy this from other countries. Try the home brands during the war. Smoke the importer out.

	Quantity.	Value.
Tobacco and manufactures of:—		
Total tobacco and mfrs. of	23,519,887	$7,283,372
Tobacco pipes of all kinds, pipe mounts, cigar and cigarette holders, and cases for same, smokers' sets and cases therefor and tobacco pouches	.....	1,015,890

Why not give the bulk of these orders to our 173 tobacco factories with their 8,763 workers and their annual wage roll of $3,325,011? Take our workers off the streets and put them back in our factories.

A WORD TO BUSINESS MEN

How many businesses are interwoven with manufacturing? The banks keep the manufacturer's account. The railways and steamship lines transport his goods and raw material. Professional men attend him and his employees. Wholesalers and retailers handle his goods and make their profit. The wages he pays filters through the pockets of his workers into innumerable hands. In other words, the manufacturer is a vast creator of business. It is only reasonable to expect that the offices in which this business is transacted, and which owe their existence largely to manufacturing, would be equipped with "made in Canada" furnishings, etc. Yet we find the following articles, which are used directly or indirectly in connection with offices, imported, although all of them are made in Canada. Thus they keep money and employment away from Canadian workers. Take paper-making and printing industries, which should supply much office material. We have 773 paper-making and printing establishments, employing 22,894 people, and paying them annually $10,866,721. If manufacturing helps to make your business, why should you not use Canadian goods for office equipment instead of importing the following? Busy factories will make your offices busy.

	Quantity.	Value.
Bags which contained cement	.....	$435,631
Bank notes, bonds, bills of exchange, cheques, promissory notes, drafts and all similar work unsigned, and cards and other commercial blank forms printed or lithographed, or printed from steel or copper, or other plates, and other printed matter, N.O.P.	.....	283,677
Books, printed, periodicals and pamphlets, or parts thereof, N.O.P.	.....	2,128,370
Bookbinders' cloth	.....	119,314
Cash registers ..... No.	1,215	61,523
Clocks, time recorders, clock and watch keys, clock movements and clock cases	.....	718,994
Ink:—		
Printing	.....	106,702
Writing	.....	53,686
Globes, geographical, topographical and astronomical	.....	19,893
Labels for cigar boxes, fruits, vegetables, meats, fish, confectionery and other goods and wares; also shipping, price or other tags, tickets or labels; and railroad or other tickets whether lithographed or printed or partly printed, N.O.P.	.....	355,531
Manuscripts and insurance maps	.....	20,539
Pamphlets, advertising, pictorial show cards illustrated advertising periodicals, illustrated price books, catalogues and price lists; advertising calendars and almanacs; patent medicine or other advertising circulars, fly sheets or pamphlets ..... Lbs.	2,426,303	716,322
Posters, advertising bills, and folders	101,345	$25,800
Pencils, lead	.....	380,358
Pens, penholders and rulers of all kinds	.....	250,384
Paper and manufactures of:—		
Bags and sacks, printed or not	.....	52,225
Cardboard, not pasted or coated	.....	82,066
Cards for playing ..... Packs	1,293,526	129,833
Envelopes ..... M.	111,462	117,080
Hangings of wall paper, including borders ..... Rolls	3,881,477	467,759
Leather board and leatheroid and manufactures of, N.O.P.	.....	50,915
Mill board, not coated or pasted	.....	100,009
Pads not printed, papier maché ware, N.O.P.	.....	8,468
Paper, felt board	.....	11,700
Paper, manufactures of, N.O.P.	.....	2,482,760
Printing paper, costing not more than 2¼ cents per lb. ..... Lbs.	7,615,792	152,160
Printing paper, N.O.P.	11,627,176	644,131
Ruled, border and coated papers, boxed papers and papetries	.....	328,777
Strawboard not coated or pasted ..... Lbs.	6,942,359	108,271
Tarred and other building papers, N.O.P.	.....	687,577
Window blinds of paper of all kinds	.....	505
Wrapping paper ..... Lbs.	7,589,459	221,746
All other kinds, N.O.P.	.....	2,325,227
Spectacles, eye-glasses and ground or finished spectacle or eye-glass lenses	.....	41,004
Spectacles, eye-glass frames, and metal parts of	.....	90,239
Photographs, chromos, chromo-types, artotypes, oleographs, paintings, drawings, pictures, engravings, or prints, decalcomania transfers of all kinds, or proofs therefrom, and similar works of art, N.O.P.; blue prints and building plans	.....	1,014,634

SPORTSMEN! BE SPORTSMEN

and stand by your country's goods. Look what you buy abroad, even though they are made in Canada:

	Quantity.	Value.
Automobiles and motor vehicles of all kinds ..... No.	8,377	$9,738,839
Automobiles and motor vehicles, parts of	.....	778,948
Bicycles and tricycles, N.O.P. ..... No.	12,407	189,371
Bicycles and tricycles, parts of, including nickle or electroplated parts for the manufacture of bicycles	.....	48,477
Gunpowder, explosives, etc.:—		
Fireworks, fire-crackers, and torpedos, all kinds	.....	55,361
Fuses, non-metallic	.....	115,594
Gun, rifle, sporting and canister powder ..... Lbs.	172,578	107,899
Gun, rifle and pistol cartridges or other ammunition, N.O.P.	.....	725,921
Gun wads, percussion caps, primers and cartridge cases	.....	57,005
Gun or pistol covers or cases, game bags, loading tools and cartridge belts of any material	.....	12,950
Bagatelle and other game tables or boards ..... No.	1,767	9,501
Balls, cues and racks and cue tips for bagatelle boards and billiard tables	.....	31,658
Bank, cod, pollock and mackerel fish lines; and mackerel, herring, salmon, seal, seine, mullet, net and trawl twine in hanks or coil, barked or not—in variety of sizes and threads—including grilling thread in balls, and head ropes, barked marline, and net morsels of cotton, hemp or flax, and deep sea fishing nets or seines, when used exclusively for the fisheries, and not including lines or nets commonly used for sportsmen's purposes	.....	$1,378,488
Tires of rubber for vehicles of all kinds ..... Lbs.	.....	1,659,065
Other manufactures of India rubber and gutta percha, N.O.P., and rubber cement	.....	1,051,250
Billiard tables ..... No.	1,077	102,475
Curling stones and handles therefor	.....	49
Cyclometers and pedometers	.....	31,029
Boats, open, pleasure, sail boats, skiffs and canoes ..... No.	722	110,306
Musical instruments, viz.:—		31,396
Brass band instruments and bagpipes	.....	$1,895
Organs, cabinet ..... No.	377	24,481
Organs, parts of	.....	13,405
Organs, pipe ..... No.	4	6,536
phonographs, graphophones, gramophones and finished parts thereof, including cylinders and records therefor	.....	740,417
Piano and organ players, mechanical ..... No.	140	33,887
Pianos ..... No.	2,724	479,605
Pianos, parts of	.....	304,299
Other musical instruments, N.O.P.	.....	254,272
Fish hooks for deep sea or lake fishing, not smaller in size than No. 2.0, not including hooks commonly used for sportsmen's purposes	.....	24,942
Trawls, trawling spoons, fly hooks, sinkers, swivels, and sportsmen's fishing bait, and fish hooks, N.O.P.	.....	57,826
Total fisheries, articles for the use of	.....	1,461,256

KEEP OUR WOOD-WORKERS BUSY

110,049 workers are employed in Canadian timber, lumber and woodworking mills. They are paid annually the enormous sum of $39,379,739. Thousands of them are now idle, because Canadians send their money abroad for the following articles, all of which are made in their own country:

	Quantity.	Value.
Wood, manufactured:—		
Barrels, empty ..... No.	74,284	$84,687
Caskets and coffins and metal parts thereof	.....	47,986
Corks, manufactured from corkwood, over three-fourths of an inch in diameter measured at the larger end ..... Lbs.	360,741	123,975
Corks manufactured from corkwood, three-fourths of an inch and less in diameter, measured at the larger end ..... Lbs.	54,047	24,626
Corkwood or cork bark, manufactures of, N.O.P., including strips, shives, shells, and washers of cork	.....	371,127
Curtain stretchers	.....	8,413
Doors, sashes and blinds (exports)	.....	.....
Fence posts and railway ties	.....	1,856,711
Handle, heading, stave and shingle bolts. N.O.P.	.....	262,428
Heading and stave bolts and bolts in the rough of poplar	.....	.....
Logs and round unmanufactured timber:—		
Furniture, house, cabinet or office	.....	$3,177,085
Handles of all kinds:—		
Ash	.....	59,266
Lasts of wood	.....	104,117
Matches	.....	90,236
Mouldings, plain, gilded or otherwise further manufactured	.....	118,080
Rakes, hay ..... No.	3,246	499
Refrigerators ..... No.	2,655	60,988
Show cases and metal parts thereof... No.	5,422	57,125
Walking sticks and canes of all kinds.....	.....	20,978
Woodenware:		
Churns, washboards, pounders and rolling pins	.....	21,680
Pails and tubs	.....	30,550
Wood pulp, chemically prepared ..... Wood pulp, mechanically ground	.....	270,608
Wood, Manufactures of, N.O.P.	.....	2,891,447

WE HAVE GREAT CAR PLANTS

But we import these:

	Quantity.	Value.
Cars, box or flat ..... No.	8,151	$6,488,672
Cars, railway passenger ..... No.	93	302,577
Cars, tram or horse ..... No.	8	1,614
Cars, other, N.O.P. ..... No.	6,969	1,179,419
Cars, parts of	.....	470,962

Perhaps the railways can explain.

CANADIANS DO WELL TO SEEK KNOWLEDGE

But do they investigate the products of their own printing plants before they send abroad the following huge orders:

	Quantity.	Value.
Newspapers and quarterly, monthly and semi-monthly magazines, and weekly literary papers unbound	.....	$1,138,867
Novels or works of fiction, or literature of a similar character, unbound or paper bound, or in sheets, not including Christmas annuals or publications commonly known as juvenile or toy books	.....	112,536
Printed music, bound or in sheets, and music for mechanical players	.....	286,665
Total books periodicals, etc	.....	6,510,539

THIS IS OUR IMPORTED OIL BILL

Let us oil our factory wheels by buying these at home:

	Quantity.	Value.
Oils:—		
Mineral:—		
Coal and kerosene, distilled, purified or refined ..... Galls.	16,545,672	$1,110,690
Crude petroleum, fuel and gas oils, .8235 specific gravity or heavier ..... Galls.	143,338,070	4,531,281
Gasoline under .725 specific gravity	43,265,067	5,846,364
Illuminating oils composed wholly or in part of the products of petroleum, coal, shale or lignite, costing more than 30 cents per gallon	214,513	83,812
Naphtha and gasoline (exports)	.....	.....
Products of petroleum, N.O.P..... Galls.	4,114,122	437,254
Fish oil:—		
Whale and spermaceti ..... Galls.	2,946	2,029
Other, N.O.P. ..... Galls.	30,831	11,724
Animal oils:—		
Lard oil ..... Galls.	50,397	$27,653
Neat's-foot ..... Galls.	24,008	15,525
Other animal oil, N.O.P. ..... Galls.	43,248	21,662
Lubricating oils, composed wholly or in part of petroleum, costing less than 25 cents per gallon ..... Galls.	6,282,819	825,792
All other lubricating oils, N.O.P. ... Galls.	1,154,352	382,594
Vegetable oils:—		
Flaxseed or linseed, raw or boiled. Galls.	1,200,404	107,108
Oil cake, linseed, and linseed oil cake meal, cotton seed cake and meal, palm nut cake and meal ..... Cwt.	125,933	186,481

HOW TO GET SOUTH AMERICAN ORDERS.

Qualified Men—Good Samples—Banking Facilities and Perseverance Needed.

THE Retail Merchants' Association, of New York, has given out the following advice to its members on methods to increase their trade with South America during and after the war:

Suggestions to be heeded in entering South American markets fall chiefly into three general groups:

Three Suggestions.

1. Only thoroughgoing and continued methods of investment have any hope of permanent success in these fields. In other words, fliers seldom succeed.

2. Goods must be supplied in the grades and patterns which the buying country demands.

3. Business procedure must be adapted to the customs of the country in which the goods are sold.

Send Agents to Study and Organize the Field.

The very best thing which could possibly be done would be for manufacturers and dealers in similar, non-competitive lines to unite in sending an experienced agent to observe and report upon the trade openings which he found. Such an agent could further establish selling agencies for each line of goods which he represented, distribute samples, etc. This form of co-operation will certainly not be illegal, its advantages will be increasingly apparent as time passes, and they will continue after European peace is declared. Whether or not such an agent is sent, an intelligent and thorough beginning should be made, and haphazard and impulsive undertaking avoided.

Wasted Effort.

In the past many futile methods have been attempted in seeking Southern buyers, and, profiting by the experience of others, we should abandon such methods. Such, for example, is the hit-or-miss policy of advertising in foreign papers. Neither advertising nor the forwarding of miscellaneous samples, often doomed to rest in a dusty corner, can be depended upon to build up trade. Furthermore, it is money wasted to mail to South America voluminous catalogues which are written in English instead of in Spanish or Portuguese, with prices stated in dollars instead of in the currency of the buying country, and with costs given at some inland town instead of at their own seaboard.

The following quotations from a recent Daily Consular and Trade Report is typical: "By far the best way to get this business would be to send a man into the field with samples, so that dealers may select the articles best suited to their trade. These agents could study the market so as to adapt the lines to suit local taste."

Qualifications of Agents.

A person should be selected who is capable of adapting himself to local conditions and who is able to speak the language of the country. Selling goods in South America is a far different matter from selling them at home. Brusque methods are not in vogue. Personal relationships and a wide social acquaintance enter into business dealings to a marked degree. Personal courtesy is an established part of business procedure. It is almost impossible to open and complete a matter of any importance at a single sitting. A lack of ability to meet such conditions is fatal, but it can be obtained only by long residence in the country. In addition, if such personal agents were on the ground they would be able to report the standing of every house in their district; they would be watchful to take advantage of new opportunities for business, etc.

To-day, as never before, it is possible to secure agents who formerly represented European concerns and who are now out of business because of restricted shipments from those countries. These agents are probably the most desirable which Americans could obtain and they would certainly be eager to form connections with American houses. In addition to having experience in a particular line and knowing thoroughly the customs of the country, they already know the men in the trade and could immediately sell American goods to their clientele of foreign buyers.

Special Goods Needed for this Trade.

In South America, clothing must be suitable to the needs and the means of the buyers; iron piping at present in use there is threaded differently from that used in the United States; corrugated roofing has a different fold; houses are commonly built upon European lines, with a resulting demand for builders' hardware in European rather than in American patterns, etc. Unless the American producer is willing to recognize these conditions and shape his goods to meet them, he might as well remain out of the field. The use of South America as a dumping ground for an occasional surplus of goods, or for getting rid of "seconds," will only work injury to the standing of other Americans trying to enter the field fairly.

European Models.

Whether a representative is sent to study the trade needs of these countries or not, the best way to be sure of ascertaining the class of goods which will find a market is to obtain samples of the European products for which there has recently been a wide demand. As far as these can be duplicated in grade, pattern and price, their sale should be assured. Germany's remarkable progress in this field is in large part to be attributed to the willingness of her manufacturers to produce lines specially desired and adapted to the foreign trade.

The need for uniformity is also evident. Successive shipments of American brands should be similar in character and grade. Only in this way can foreign consumers be induced to demand the brands upon which they can depend. Moreover, in practically every one of these countries there is a class of purchasers who are willing to pay for quality if they can depend upon getting it, and this class of customers should be satisfied.

Methods of Paying for Goods.

But even with personal agents representing American lines and with goods which are satisfactory to the trade, the long credits customarily granted in these markets still remain as a bugbear and obstacle to American exporters. Our manu-

facturers and exporters have been accustomed to a rapid turnover, and because of the lack of information they usually do not consider it wise to grant long credits to Latin American buyers. In this country, thirty days' time, and the term often means more, allows the buyer at least to begin his sales and his realization on his investment. Probably one hundred and twenty days would not find the South American buyer of our goods in a similar condition. As a result, he desires a postponement of payment in accordance with foreign practice. European manufacturers have been willing to meet this custom by selling on six months' or even on nine months' time. American exporters on the other hand have usually granted not more than three months' credit at the most.

Branch Banks Needed.

South American branches of European banks have for a long time afforded an advantage to our foreign competitors in this respect. Under the Federal Reserve Board, however, the National City Bank of New York plans to open branches in Argentina and Brazil within a short time. In fact this bank has already established credit with the largest bank in Buenos Aires. In addition to doing a general banking business the National City Bank expects to furnish up-to-date credit ratings of all the leading houses in the districts which the bank serves, and, furthermore, to disseminate suggestive general and trade information for the guidance of American exporters. It is planned that all these branches of service will be in operation within six months. The establishment of these branch banks, and the awakened appreciation on the part of the banking public of the advantage of going after this class of business, should develop further banking accommodations between the two countries in the near future, and place American manufacturers in a position to offer terms comparing favorably with those of their European rivals. In fact, the present disorganized condition of European capital would seem to indicate that European banks could not soon return to their former liberal policy.

The Question of Credits.

Exporters new to this field will appreciate the wise necessity for caution in regard to credits, at least until they have a personal knowledge of foreign firms and conditions.

Time Now Ripe.

In many ways, therefore, financial conditions and trade customs in these countries will soon be less obstructive to American exporters.

But these suggestions are intended to encourage only exporters planning a thorough and long-continued campaign. There never was a time so favorable to the success of such a campaign as the present.

TRANSPORTATION

By J. E. WALSH.

ROUTES FROM HALIFAX TO WEST INDIAN PORTS.

Santiago, Cuba.

Average time, Halifax to Santiago, 9 days.

Halifax-Cuba-Jamaica Service, Pickford & Black, Ltd., Mgrs. Norwegian steamers.

Sailings from Halifax every alternate Thursday.

Turk's Island.

Average time, Halifax to Turk's Island, 7 days.

Halifax-Cuba-Jamaica Service, Pickford & Black, Ltd., Mgrs. Norwegian steamers.

Sailings from Halifax every twenty-eight days.

Jamaica.

Average time, Halifax to Kingston, 10 days.

Halifax-Cuba-Jamaica Service, Pickford & Black, Ltd., Mgrs. Norwegian steamers.

Sailings from Halifax every alternate Thursday.

Steamers call at all principal outports in Jamaica, including Black River, Savanna-La-Mar, Montego Bay, St. Ann's Bay, Falmouth, and Port Antonio.

Bermuda.

Average time, Halifax to Bermuda, 3 days.

The Royal Mail Steam Packet Company. British Steamers —Pickford & Black, Ltd., General Agents, Halifax, N.S.; Wm. Thomson & Co., Agents, St. John, N.B.

Steamers sail every fortnight.

Leeward Islands.

The Royal Mail Steam Packet Company. British Steamers —Pickford & Black, Ltd., General Agents, Halifax, N.S.; Wm. Thomson & Co., Agents, St. John, N.B.

Steamers sail for St. Kitts, Antigua, fortnightly, for Montserrat and Dominica every twenty-eight days.

Windward Islands.

Average time, Halifax to Barbados, 11 days; to Trinidad, 13 days.

The Royal Mail Steam Packet Company. British Steamers —Pickford & Black, Ltd., General Agents, Halifax, N.S.; Wm. Thomson & Co., Agents, St. John, N.B.

Steamers sail fortnightly for Barbados, Grenada and Trinidad, and every 28 days for St. Lucia and St. Vincent.

Demerara.

Average time, Halifax to Demerara, 15 days.

The Royal Mail Steam Packet Company. British Steamers —Pickford & Black, Ltd., General Agents, Halifax, N.S.; Wm. Thomson & Co., Agents, St. John, N.B.

Steamers sail for Demerara every fortnight.

New York and South America Line.

This line operates a service to Chile and Peru, also to Bahia Blanca (Argentina), under the American flag.

So far as West Coast trade is concerned, it operates largely through the Panama Canal, though an occasional sailing is maintained via the Straits route touching at the extreme Southern Chilean, also Patagonian, ports.

United Fruit Company.

Through the Traffic Department of this Company it has been learned that all their vessels have been registered under the American flag.

Increased Direct New York-Kingston-Jamaica Outport Service.

Commencing Saturday, September 12, 1914, the United Fruit Company, of New York, will, in addition to the regular Wednesday sailings for Kingston, operate direct weekly service to Kingston and Jamaica outports, on the following itinerary subject to change without notice:

Arrive		Leave
	New York.	Saturday.
Thursday.	Kingston.	Friday.
Friday.	Morant Bay.	Friday.
Friday.	Bowden.	Friday.
Friday.	Port Antonio.	Saturday.
Saturday.	Annotto Bay.	Saturday.
Saturday.	Port Maria.	Saturday.
Saturday.	St. Ann's Bay.	Sunday.
Sunday.	Falmouth.	Sunday.
Sunday.	Montego Bay.	Monday.
Monday.	Lucea.	Tuesday.
Tuesday.	Savanna-La-Mar	Tuesday.
Tuesday.	Black River.	Tuesday.
Wednesday.	Kingston.	Friday.
Thursday.	New York.	

Cargo will be accepted by steamers performing this service both outward and homeward.

Increased New York-Santiago de Cuba Service.

Commencing Thursday, September 3, 1914, this Company will operate Direct Weekly service from New York to Santiago, Cuba, thus insuring ample facilities for all cargo offering.

Shipping permits should be secured from Freight Department, Room 1637, 17 Battery Place, before making delivery of cargo.

Customs clearances must be filed with Freight Department on the day before sailing of steamer.

For rates and other information for both services, apply to M. V. Rodney, General Freight Agent, 17 Battery Place, New York.

AMERICAN AND CUBAN STEAMSHIP LINE.

"All vessels registered under American or neutral flags."

THE NEW YORK & PACIFIC STEAMSHIP CO., LTD.

"Are now using the Panama Canal and continue to run their steamers under the British flag."

WESSEL, DUVAL & COMPANY, WEST COAST LINE.

"Intend dispatching the British steamer "Lord Antrim" for the West Coast of South America via the Panama Canal early in October. Another steamer to follow a month later."

THE AMERICAN EXPRESS COMPANY AND SOUTH AMERICAN TRADE.

The American Express Company have announced that they are sending from New York, on October 1st, on the S.S. *Vestris*, Mr. James Thane, as special representative of the American Express Company and New York Central Lines, and Mr. A. B. Howard, as special representative of the Financial department of the company, to South America, for the purpose of stimulating the export of Canadian and United States goods to South American countries. The company propose to co-operate with manufacturers in order to get revenue from additional transportation. Visits will be paid by the above mentioned to the chief ports or commercial countries of Brazil, Argentina, Uruguay, Chili and Peru, stopping on the return journey at Panama and Colon.

The company invites special enquiries from exporters and importers with respect to trade in these countries.

"Exporters and importers," says the company, "generally may avail themselves of the services of our representatives mentioned herein, who will give attention in so far as may be practicable to any enquirers within reasonable scope relative to foreign trade matters and conditions at the points they may visit."

The company lays stress on the word "specific." Queries should be classified and localized. If a manufacturer wishes to send trade catalogue with these representatives, the company suggest that he send an illustrative sheet only with a condensed description of a few articles, not only in English, but in Portuguese for Brazil, and Spanish for other South American countries. It is evident, of course, that these two representatives could not burden themselves with large quantities of advertising matter. They are not in any sense sales or manufacturers' agents. Their aim is to provide better transportation and financial facilities for the development and extension of foreign trade, but, for the sake of the connection which they will form with manufacturers, they will be glad to give them as much information as possible.

Communications on this subject should be addressed to American Express Company, South American Department, 65 Broadway, New York. Any correspondence received after the representatives sail will be forwarded.

HOULDER, WEIR & BOYD, Inc., AMERICAN & RIO PLATA LINE.

Our old service has been abandoned and all existing contracts have been cancelled. We have, however, established a new service and are trying to supply tonnage as is needed. Our rates, however, have been advanced 25 per cent. over the old tariff rates on account of the war situation. Our steamers only go to the East Coast of South America (Argentine).

FUNCH, EDYE & COMPANY,

Joint Brazil Service of Hamburg-South American S. S. Co. & Hamburg-American Line.

We beg to inform you that the service of the Hamburg-South American S. S. Co. and Hamburg-American Line, Joint Service, for Brazil, has, owing to the European troubles, been suspended, and we are at present running a line of chartered steamers ourselves to the principal ports in Brazil. Our steamer which has just sailed is the Norwegian SS. "Fimreite," and this service may be operated by either British or neutral steamers. We very much doubt whether any boats under the American flag will be worked by us in this trade.

LEGISLATION

BY F. W. WEGENAST

NEW MEMBERS OF WORKMEN'S COMPENSATION COMMITTEE.

THE Ontario Government has announced that Mr. A. W. Wright and Mr. Geo. A. Kingston will serve with Chairman Samuel Price, K.C., of St. Thomas. Alexander Whyte Wright has been chosen as the second member and vice-chairman of the commission. Born at Elmira, Ont., about 70 years ago, his life has been largely spent in Canada. In 1895 he was appointed by the Dominion Government a commissioner to enquire into sweatshop conditions. In 1897 he went to New York to edit the *American Artisan*, having acquired considerable journalistic experience in his younger days as editor of the Guelph *Herald*, the Orangeville *Sun*, the Stratford *Herald* and Toronto *National and Labor Reformer*. On his return, some years later, he became Conservative organizer for Ontario. His present home is in Niagara, although he lived for many years in Toronto.

Samuel Price, K.C., whose appointment as chairman of the Commission was announced previously in INDUSTRIAL CANADA, is eminent among the lawyers of the province. He lives in St. Thomas, and specializes in actuarial work and the more abstruse branches of his profession. He has served on royal commissions, and once declined the chairmanship of the Ontario Railway Board.

The third member of the commission, George A. Kingston, is 45 years of age, and has lived in Toronto continuously since 1889. He was born near Stirling, in Hastings County. During the seven years which followed his graduation from Osgoode Hall in 1892, he practised law.

The following circular has been issued by the C.M.A. to its Ontario members:

"It has been announced that the new Workmen's Compensation Act of Ontario will go into effect on 1st January. The Act is in general outline based on proposals made by the Association and we take this opportunity of urging our members, notwithstanding the many and serious defects of the measure, to extend to the administering Commission their earnest co-operation in making it as successful as possible. As we have already advised you considerable portions of the Act will have to be abandoned to make it workable, but we believe that we may confidently expect that the administering Board will make every effort to work out a fair and reasonable system, and we should like to urge upon our members that notwithstanding the unsatisfactory circumstances attendant upon the passing of the measure nothing in the way of co-operation and sympathy on the part of employers should be wanting to assist the Board in its difficult task.

"The Legal Department of the Association will be at the disposal of members either for the purpose of advising or assisting in straightening out any difficulties that may arise, and we would respectfully suggest that you utilize the Department freely."

Chairman Price will receive $10,000 annually as his salary. Mr. Wright, $8,500, and Mr. Kingston, $7,500.

PATENTS.

The following is the text of an Order-in-Council issued by the Dominion Government in respect to patents under the authority of the War Measures Act, 1914:

1. "Commissioner" means the Commissioner of Patents and includes the Deputy Commissioner of Patents.

2. The Commissioner may, on application of any person, and subject to such terms and conditions, if any, as he may think fit, order the avoidance or suspension in whole or in part of any patent or license the person entitled to the benefit of which is the subject of any State at war with His Majesty, and the Commissioner, before granting any such application, may require to be satisfied on the following heads:—

(*a*) That the person entitled to the benefit of such patent or license is the subject of a State at war with His Majesty;

(*b*) That the person applying intends to manufacture, or cause to be manufactured, the patented article, or to carry on, or cause to be carried on, the patented process within the Dominion of Canada.

(*c*) That it is in the general interest of the country or of a section of the community, or of a trade, that such article should be manufactured or such process carried on as aforesaid.

The fee payable on such application shall be ten dollars.

The Commissioner may at any time, in his absolute discretion, revoke any avoidance or suspension of any patent or license ordered by him, but if any person during the period of such avoidance or suspension begins to manufacture, use or sell in Canada the invention covered by said patent such person may continue to manufacture, use or sell such invention in as full and ample a manner as if such revocation had not been made.

Provided always that the Commissioner may at any time, if in his absolute discretion he deem it expedient in the public interest, order the avoidance or suspension in whole or in part of any such patent or license upon such terms and conditions, if any, as he may think fit.

3. The Commissioner may, at any time, during the continuance of these Orders and Regulations, avoid or suspend any proceedings or any application made under the Patent Act by a subject of any State at war with His Majesty.

4. The Commissioner may also, at any time, during the continuance of these Orders and regulations, extend the time prescribed by the Patent Act or any rules made thereunder, for doing any act or filing any document, upon such terms and subject to such conditions as he may think fit in the following cases, namely:—

(*a*) Where it is shown to his satisfaction that the applicant, patentee, or proprietor, as the case may be, was prevented from doing the said act, or filing the said document, by reason of active service or enforced absence from this country, or any other circumstances arising from the present state of war, which, in the opinion of the Commissioner would justify such extension;

(*b*) Where the doing of any act would, by reason of the circumstances arising from the present state of war, be prejudicial or injurious to the rights or interests of any applicant, patentee or proprietor as aforesaid.

Such extension of any prescribed time, if granted after its expiration, shall have the same effect as if granted prior thereto, provided such expiration occurred on or after the fourth day of August, 1914.

5. The Commissioner may refuse to register the assignment of any patent made by a subject of any State at war with His Majesty, and filed in the Patent Office on or after the fourth day of August, 1914, unless satisfied that such assignment was made in good faith and not for the purpose of evading any of the provisions of the foregoing Orders and Regulations.

6. The term "person" used in these Orders and Regulations shall, in addition to the meaning given thereto by par. (20) of Section 34 of "The Interpretation Act," include any government department.

7. These Orders and Regulations shall come into operation as and from the fourth day of August, 1914.

ACCIDENT PREVENTION CAMPAIGN.

Simultaneously with the going into operation of the new Workmen's Compensation Act a campaign of accident prevention will be opened under the auspices of the Canadian Manufacturers Association. Meetings of employers in the various insurance groups under the Act will probably be held within the next few weeks with a view to organizing accident prevention associations. The Act provides facilities for these associations and gives them power to make rules for the prevention of accidents and to appoint safety engineers to be paid out of the group insurance funds. The activities of the associations, if carefully and efficiently directed, may go a long way toward keeping down insurance rates and mitigating the excesses and anomalies of the Act.

THE MORATORIA—DEFERRING THE PAYMENT OF DEBTS BY LAW.

Here is at least a partial list of the countries which, according to press dispatches and other advices, have resorted to moratoria or similar devices, such as extended bank holidays, or which have at least passed special acts authorizing a resort to a moratorium: Argentina, Austria, Brazil, Bulgaria, China, Cyprus, Denmark, Egypt, England, France, Germany, Italy, Norway, Peru, Russia, Sweden, Switzerland, Turkey, Uruguay.—*New Rork Annalist.*

"I was told that more than $5,000,000.00 worth of shoes entered Canada from the United States last year. Just stop and realize that *this business diverted to your own Canadian factories would keep the wheels turning a little bit more steadily.* When Canadians buy "Made-in-Canada" goods, the money paid out still circulates in this country, so that the whole community benefits thereby; when Canadians buy elsewhere the money goes out of the country and 99 per cent. of it fails to return. *Do we need that 99 per cent. ?*"

The above is an extract from a circular issued by Mr. George A. Slater, of the George A. Slater, Limited, Montreal, to prospective customers.

CANADIAN SAILINGS TO FOREIGN PORTS

The following is a list of Canadian sailings to foreign ports for October. Owing to present disturbed conditions it must be understood that the sailings appended below cannot be guaranteed by the steamship companies:—

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, R.M.S. Niagara, October 28; from Victoria, R.M.S Niagara, October 28.

China.

To Hong Kong—Blue Funnel Line: From Victoria, Teucer, September 30.

To Shanghai and Hong Kong—Canadian Pacific Railway Company's S.S. Line: From Vancouver, Empress of India, October 15, 1914.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, R.M.S. Niagara, October 28; from Victoria, R.M.S. Niagara, October 28.

Great Britain.

To Avonmouth—Dominion Line: From Montreal, Turcoman, October 3; Englishman, October 17; Manxman, October 31.

To Bristol—Canadian Northern Steamships: From Montreal: Royal Edward, October 6; Royal George, October 20.

To Glasgow—Blue Funnel Line: From Victoria, Teucer, September 30.

To Glasgow—Blue Funnel Line: From Victoria, Teucer, September 30.

To Liverpool—Furness Withy & Co., Ltd.: From Halifax, Duranga, October 3; Tabasco, October 19.

To Liverpool—White Star-Dominion Line: From Montreal, Canada, October 3; Laurentic, October 10; Teutonic, October 17; Megantic, October 24; Canada, October 31.

To London—Blue Funnel Line: From Victoria, Teucer, September 30.

To London—Furness Withy & Co., Ltd.: From Halifax, Rappahannock, October 3; Shenandoah, October 13; Kanawha, October 23.

To Manchester—Manchester Liners, Ltd.: From Montreal, Manchester Commerce, October 3; Manchester Spinner, October 10; Manchester Shipper, October 17; Manchester Importer, October 24; Manchester Citizen, October 31.

Japan.

To Yokohama, Kobe—Blue Funnel Line: From Victoria, Teucer, September 30.

To Yokohama, Kobe and Nagasaki—Canadian Pacific Railway Company's S.S. Line: From Vancouver, Empress of India. October 15.

To Yokohama, Kobe and Moji—Canadian Pacific Railway Company's S.S. Line: From Vancouver, Monteagle, October 24.

New Zealand.

To Auckland—Canadian-Australasian Royal Mail Line: From Vancouver, R.M.S. Niagara, October 28; from Victoria, R.M.S. Niagara, October 28.

INSVRANCE

AFTER ten years of study and experiment, two chemists of Milwaukee, Wis., have demonstrated to the petroleum-using world that they have successfully solved the problem of extinguishing of fires produced by the explosion or combustion of inflammable oils in tanks.

The device was subjected to a severe test in May last, a tank twenty-seven feet in diameter being erected especially for the convenience of the Underwriters' Laboratory in Chicago. Sixty gallons of gasoline were floated upon the water contained in the tank. A lighted torch was dropped into the tank, and in 10½ seconds the device came into operation; 12 seconds later the fire was out.

A second test was made by the Standard Oil Company in connection with a tank forty feet in diameter. The extinguishing device consisted of four iron standpipes, thirty inches in diameter, the height of the tank, and arranged at intervals on the outside. From each standpipe into the top of the tank was a direct outlet about twelve inches wide by eight inches deep. The standpipes contained one gallon of chemical solution for each square foot of oil surface. In the tops of the standpipes, lead-lined thimbles containing acid were suspended and maintained in position by a phosphor bronze cable supplied with fusible links and connected to all standpipes. The tank was filled with water to within three feet of the top. Three thousand gallons of crude petroleum and some naptha were floated thereon and a torch applied. The links soon fused and the acid containers dropped into the chemical solution in the standpipes and the foam started instantly in four streams into the tank. In nine seconds the fire was completely extinguished, having been smothered under fourteen inches of foam.

Other and more severe tests have been carried out which have proved the efficiency of the Erwin equipment. They demonstrated the completeness of the salvage, the lack of damage to the tank or appliance and that the standpipes needed only to be recharged with chemicals to be again ready for use.

Origin of Salem Fire.

The Salem fire originated in a leather factory. There are one or two places in a leather factory where there is always danger of explosion. If these plants manufacture any enamel or patent leather, the daubing mixture contains a large percentage of gasoline or benzine, and in the rooms where this is coated on the leather there is always danger of explosion from any open flame or spark of any kind. This operation is usually carried on in a small, detached building by itself. A violent explosion has been known to occur from an employee striking a nail in his shoe upon a nail in the floor.

There is also a slight danger of explosion from the leather buffing rooms if the dust is not properly cared for.—*Safety Engineering.*

Workmen's Compensation in New York.

A situation of considerable difficulty now confronts New York State Workmen's Compensation Commission. According to the statements of the commissioners themselves, notices of accidents are coming in at the rate of more than a thousand a day. Up to July 27th the claims numbered 32,100, or 150 per day. Out of every hundred non-fatal accidents reported, the number of claims arising is estimated at 24, according to Massachusetts experience. Thus there would be an average of 286 claims for compensation daily in New York State. Under the law, the Commission alone is entitled to pass on claims, and no compensation can be paid except by it. The maximum day's work, so far, of the commission is 93 cases. Thus on July 27 there were 7,704 cases deserving compensation, of which 93 were disposed of. It would appear as if the machinery provided by the State could not handle the situation. Meantime the delay will probably entail a certain amount of suffering among injured workmen and their families.

Western Firemen's Association.

At the Western Canada Firemen's Association Convention, held in Regina, Provincial Fire Commissioner McLean congratulated the Association on the manner in which business had been carried out, and felt sure that the visiting Fire Chiefs had been impressed with the fact that the Regina Fire Department had attained a standard of general efficiency and modern equipment second to none in the Western Provinces. Strangers visiting Regina would carry away the impression of a clean and compact city. Much credit for this was due to the instinctive tidiness of the citizens.

Mr. McLean pointed out that the day was fast passing when the duties of fire departments were regarded as ceasing with the extinguishment of fires. Fire prevention—seeking out and eliminating causes of fire—was receiving endorsement by the hands of Fire Chiefs Associations throughout the United States and Canada. Practically all the leading cities in Saskatchewan had introduced a system of inspection of premises by firemen. Very little had been done, however, to influence or inspire municipal action along the lines that would make for conservation of life and property from fire. In the case of the smaller towns and villages this was especially noticeable. There were instances where an inspector from the Fire Commissioner's office had visited towns and found that fire prevention regulations were not only deficient but in many cases non-existent. However, the situation was showing signs of improvement and an awakened interest was being manifested, as evidenced in the number of requests for information, as to proper methods to adopt in combating fire.

Mr. McLean has issued a bulletin, intended particularly for farmers, drawing attention to the importance of fire prevention. He points out that an analysis of reported fires shows that, in rural districts, adequate precautions against fire are not generally taken, whereas farmers as a class should use exceptional care, in view of the fact that they are generally a considerable distance from outside help. Another aspect of the case to be considered is that where women and children are so often left alone every human consideration demands the utmost vigilance. Mr. McLean enumerates a number of simple precautions the general adoption of which would materially decrease the annual record of farm fires.

BUY IN CANADA OR BRITISH EMPIRE.

The following has been adopted by the Purchasing Department of the B. J. Coghlin Company, Limited, Montreal:—

"We will buy Canadian-made goods as far as possible, submitting samples of our requirements and giving Canadian manufacturers every assistance to supply our wants, and where we cannot buy in Canada, we will give every preference to the Mother Country and other parts of the Empire."

TARIFF

By J. R. K. BRISTOL

IN regard to the question as to whether German products may be imported from the United States or not the Customs Department have ruled that if such goods were actually exported from Germany previous to the 5th of August, they may be entered at Customs in Canada; but if exported from Germany after that date they are prohibited from entry at Customs in Canada. The same principle applies in respect to Austrian goods except that the prohibition is against shipments from Austria after the 12th of August. As to the purchase of German or Austrian goods in stock in the United Kingdom the Commissioner of Customs has ordered that foreign merchandise originating in Germany and Austria in stock in the United Kingdom should be accompanied by a declaration of ownership bearing date of importation previous to the declaration of war, otherwise such merchandise will not be permitted into the Dominion of Canada.

A further proclamation by the King in regard to trade with the enemy has been issued and appears in the Canada Gazette of the 12th of September, 1914. This proclamation is somewhat more explicit than the former proclamations along the same line. Persons resident, carrying on business or being in the Dominion of Canada are ordered,

"(1) Not to pay any sum of money to or for the benefit of an enemy.

"(2) Not to compromise or give security for the payment of any debt or other sum of money with or for the benefit of an enemy.

"(3) Not to act on behalf of an enemy in drawing, accepting, paying, presenting for acceptance or payment, negotiating or otherwise dealing with any negotiable instrument.

"(4) Not to accept, pay or otherwise deal with any negotiable instrument which is held by or on behalf of an enemy, provided that this prohibition shall not be deemed to be infringed by any person who has no reasonable ground for believing that the instrument is held by or on behalf of an enemy.

"(5) Not to enter into any new transaction, or complete any transaction already entered into with an enemy in any stocks, shares or other securities.

"(6) Not to make or enter into any new marine, life, fire or other policy or contract of insurance with or for the benefit of an enemy; nor to accept or give effect to any insurance of any risk arising under any policy or contract of insurance (including reinsurance) made or entered into with or for the benefit of an enemy before the outbreak of war.

"(7) Not directly or indirectly to supply to or for the use or benefit of, or obtain from, an enemy country or an enemy, any goods, wares or merchandise, nor directly or indirectly to supply to or for the use or benefit of, or obtain from any person any goods, wares or merchandise, for or by way of transmission to or from an enemy country or an enemy, nor directly or indirectly to trade in or carry any goods, wares or merchandise destined for or coming from an enemy country or an enemy.

"(8) Not to permit any British ship to leave for, enter or communicate with, any port or place in an enemy country.

"(9) Not to enter into any commercial, financial or other contract or obligation with or for the benefit of an enemy.

" (10) Not to enter into any transactions with an enemy if and when they are prohibited by an Order in Council made and published on the recommendation of a Secretary of State, even though they would otherwise be permitted by law or by this or any other Proclamation.

"And we do hereby further warn all persons that whoever in contravention of the law shall commit, aid or abet any of the aforesaid Acts, is guilty of a crime and will be liable to punishment and penalties accordingly.

" Provided always that where an enemy has a branch locally situated in British, allied, or neutral territory, not being neutral territory in Europe, transactions by or with such branch shall not be treated as transactions by or with an enemy."

Board of Customs Decisions.

Addressographs and typemaking accessories therefor, manufactured by the Addressograph Sales Company, Chicago, declared to be dutiable under tariff item 442. Ruling in effect from 1st July, 1914.

Chick Chick egg dye, per sample, being paper saturated with dye stuff, declared to be dutiable under tariff item 199.

Departmental Rulings.

Chain, stud link or otherwise, is only admitted under item 470 as being cable chain, when the iron of which the links are made is ¾ inch or over in diameter. Cable chain for vessels is not restricted as to use to anchoring or mooring.

Christmas stockings containing any article or articles which are the manufacture or produce of any country not entitled to preferential treatment shall not be allowed entry in Canada under the Preferential Tariff. In effect from September 17, 1914.

Customs file No. 82,242—**Communion Glasses** imported separately, not in cabinets, free, Item 691.

The duties collected for the month of August amount to $8,358,948 compared to $10,125,376 for the month of August, 1913; and the total value of importations for the month is $55,843,322 compared to $58,515,265 for August, 1913. However, the total of August, 1914, includes coin and bullion to the value of $11,452,719, compared to only $572,186 in the same month a year ago. There is a falling off of $9,700,000 in dutiable goods and of $3,700,000 in free goods for August, 1914, as compared with August, 1913.

The total value of domestic merchandise exported was $31,510,732 as compared to $34,175,708 for the same month a year previously; and the total value of foreign and domestic merchandise exported for the corresponding months was, 1914, $44,060,354, and August,, 1913, $37,337,582.

WHERE GREAT BRITAIN GETS HER FOOD

THE variety of sources from which Great Britain draws her food supply, and incidentally the dependency of that food supply upon the control of the sea, is well illustrated by a statement compiled from British returns which appears in a recent report of the Department of Trade and Commerce. The period taken comprises the twelve months ending with April, 1914, and the quantities denoted by the statistics are in hundredweights. Great Britain, being at war with Germany and Austria, is buying no food supplies at present from these countries, and what they previously furnished must be bought elsewhere.

Wheat and Other Grains.

During the last year Great Britain bought more wheat from the United States than from any other country. Her purchases being: Argentine Republic, 10,483,600; Australia, 11,988,453; British East Indies, 15,590,400; Canada, 23,213,545; Chili, 578,000; Germany, 1,084,700; New Zealand, 34,600; Roumania, 350,500; Russia, 8,469,700; Turkey, 52,400; United States, 33,031,972; other countries, 162,000. Total, 105,039,870 cwts.

For other grains Great Britain was dependent on most of the principal countries of the world. Her purchases were as follows:—

Barley.—British East Indies, 2,952,800; Canada, 2,269,300; Roumania, 1,676,800; Russia, 6,284,900; Turkey, 2,068,100; United States, 2,573,500; other countries, 1,924,248. Total, 19,749,648 cwts.

Beans.—Egypt, 1,580; Germany, 44,450; Morocco, 960; Turkey, 13,120; other countries, 1,452,279. Total, 1,512,329 cwts.

Indian Corn.—Argentine Republic, 35,987,378; Canada, 25,300; Roumania, 2,715,000; Russia, 1,748,500; United States, 1,059,100; other countries, 680,477. Total, 42,215,755 cwts.

Oats.—Argentine Republic, 5,697,800; Canada, 2,294,700; Germany, 4,081,700; Roumania, 896,100; Russia, 2,854,000; Turkey, 94,100; United States, 1,213,130; other countries, 1,070,848. Total, 18,202,378.

Peas.—British East Indies, 731,070; Canada, 6,720; Russia, 208,390; other countries, 758,031. Total, 1,704,211 cwts.

Wheat, Meal and Flour.

Canada and the United States furnished practically all of the wheat, meal and flour consumed in the United Kingdom, as the following table illustrates:—Argentine Republic, 157,300; Australia, 366,075; Austria-Hungary, 103,054; Belgium, 44,440; Canada, 4,217,341; France, 392,500; Germany, 428,000; United States, 5,826,926; other countries, 247,190 Total, 11,782,826 cwts.

Fish, Salted and Cured.

Canada leads in this article of food:—Canada, 484,671; France, 21,299; Netherlands, 2,601; Newfoundland, 1,610; Norway, 300,052; Portugal, 125,863; United States, 400,653; other countries, 364,449. Total, 1,701,198 cwts.

Little Butter but Much Cheese.

The greater part of Great Britain's butter comes from Denmark, which, although a neutral country, is almost isolated from England on account of the war. Canada sells Great Britain a surprisingly small amount of butter and should increase her exports in this article. As the following table illustrates, Canada stands last in supplying Great Britain with butter:—Argentine Republic, 50,931; Australia, 534,524; Canada, 813; Denmark, 1,750,890; France, 239,828; Netherlands, 151,015; New Zealand, 332,166; Russia, 811,933; Sweden, 346,224; United States, 5,589; other countries, 29,612. Total, 4,253,525. But this may be partially explained by the fact that Canada leads the rest of the world in supplying Great Britain with cheese:—Australia, 19,216; Canada, 1,235,604; Italy, 105,208; Netherlands, 293,229; New Zealand, 683,497; United States, 21,587; other countries, 32,908. Total, 2,391,249 cwts.

THE TRADE OF SOUTH AMERICA.

The Argentine Republic, Bolivia, Brazil, Chili, Columbia, Ecuador, Paraguay, Peru, Uruguay and Venezuela annually export $1,177,000,000 worth of goods and import $961,000,000 worth. Europe buys $700,000,000 worth of products from these countries and sells them goods valued at $660,000,000. The greater part of this trade is divided as follows:

	Imports from above.	Exports to above.
Great Britain	$273,000,000	$270,000,000
Germany	180,000,000	157,000,000
France	84,000,000	104,000,000
Italy	54,000,000	27,000,000
Belgium	47,000,000	60,000,000
Austria	8,000,000	22,000,000
Netherlands	8,000,000	44,000,000
Switzerland	6,000,000	.....
United States	155,000,000	250,000,000

Ninety per cent. of this trade is carried in European ships.

COMMERCIAL POSSIBILITIES OF NOVA SCOTIA.

A booklet entitled "The Commercial Possibilities of Nova Scotia" has been published by the Commercial Club of Halifax, N.S. It contains much valuable information and may be secured upon application to the secretary.

WINNIPEG'S BUY-IN-CANADA CAMPAIGN.

The Winnipeg Industrial Bureau has issued a manufacturers' directory which contains the names of 366 local firms which produce everything from macaroni to machinery. In scanning the list of commodities which are manufactured here the following articles of import are noted: Agate-ware, bevelled glass, biscuits, calendars, candy, caps and hats, chemicals and drugs, clothing, confectionery, electrical fixtures and apparatus, envelopes, furs, glass manufactures, gloves, jewellery, labels, knitted goods, leather goods, soaps, machinery, medicines, mittens, paints, pickles, railway supplies, sanitary fittings, sauces and catsups, shirts, skates, syrups, tinware, underwear, varnishes, and wood manufactures.

A SUMMARY OF BRITAIN'S PURCHASES FROM AUSTRIA, BELGIUM, FRANCE AND GERMANY

WHAT CAN CANADA SUBSTITUTE FOR SOME OF THESE COMMODITIES?

Imports into the United Kingdom from Austria-Hungary, Belgium, France and Germany

Year Ended December 31st, 1912

(Compiled specially for Industrial Canada by the Trade and Commerce Department, Ottawa)

Note: £=$4.86

PRINCIPAL ARTICLES GREAT BRITAIN BUYS.	From Austria-Hungary	From Belgium	From France	From Germany
Animals, living:	£	£	£	£
Cattle	.....	.....	.....	.....
Horses	.....	33,351	222,361	8,755
Sheep	.....	.....	.....	.....
Caoutchouc and gutta percha	.....	172,521	276,582	373,467
Caoutchouc, manufactures of	38,245	47,257	54,395	352,787
Carriages, wagonettes, etc., motor cars and parts thereof	.....	753,127	2,726,203	1,453,314
Chemical manufactures and products enumerated	38,564	193,253	542,025	1,716,654
Cocoa, raw	.....	54,300	61,450	77,308
Coffee, raw	.....	.....	5,188	4,961
Corn, grain, meal and flour:				
Barley	111,307	20,735	8,224	417,340
Beans	29,613	22,352	21,045	41,809
Buckwheat	.....	.....	6,755	.....
Lentils	.....	.....	.....	5,000
Maize	.....	.....	.....	.....
Oats	.....	.....	.....	777,891
Peas	.....	6,081	.....	232,684
Rye	.....	.....	.....	24,422
Wheat	.....	294	.....	135,293
Maize meal	.....	96,796	.....	.....
Oatmeal	.....	.....	.....	.....
Wheat flour	86,541	19,016	171,875	199,234
Flour and meal, other, except rice flour	.....	.....	.....	57,709
Malt	.....	.....	.....	9,488
Offals of corn and grain, except rice meal, etc.	.....	.....	12,441	2,544
Rice, rice meal and flour	48,129	16,071	.....	124,363
Farinaceous substances:				
Sago, sago meal and flour	.....	.....	.....	.....
Tapioca and cassava powder	.....	.....	698	.....
Tapioca flour	.....	.....	.....	.....
Other farinaceous substances	.....	.....	30,246	15,610
Total corn, grain, etc	275,590	181,345	251,284	2,043,387
Cotton, raw	.....	16,835	105,987	46,991
Cotton manufactures	38,915	1,076,560	1,384,482	6 868,012
Drugs	15,368	15,560	95,360	344,523
Dyeing or tanning stuffs	87,004	40,630	502,069	1,709,386
Fish	.....	17,418	78,434	3,511
Flax, hemp and jute, unmanufactured	25,789	1,535,251	28,708	160,239
Fruits:				
Apples, raw	.....	49,579	22,966	1,412
Bananas, raw	.....	.....	.....	.....
Currants, dried	.....	.....	.....	.....
Figs and fig cake, dried	.....	6	.....	.....
Grapes, raw	.....	44,573	247	.....
Lemons, limes and citrons	.....	.....	.....	3,459
Oranges	.....	.....	858	2,897
Pears, raw	.....	177,348	216,329	12,061
Plums, raw	.....	17,164	225,528	39,662
Raisins, dried	.....	.....	2,679	11,425
Glass	201,612	1,442,242	219,761	1,131,269
Hides, raw	.....	117,235	317,905	191,587
Leather	60,475	191,407	860,829	2,091,700
Leather manufactures	480,210	315,557	733,787	1,280,937
Machinery and parts thereof	13,541	230,039	182,638	2'435.917
Metals and ores	35,132	5,060,696	2,228,578	9,539,590
Musical instruments	.....	14,958	76,243	767,992
Oils	39,802	785,477	269,435	1,376,536
Oil seed cake	.....	.....	50,324	402,177
Paper and articles of paper	28,315	428,905	274,250	1,515,600
Paper-making materials:				
Pulp of wood	35,122	.....	.....	293,877
Other kinds	.....	109,921	204,676	46,604

PRINCIPAL ARTICLES.	From Austria-Hungary	From Belgium	From France	From Germany
Provisions:	£	£	£	£
Butter	.....	.....	1,559,452	12,221
Butter margarine	.....	2,008	75,940	.....
Cheese	.....	1,429	56,852	.....
Cheese margarine	.....	.....	.....	.....
Eggs	422,360	14,359	308,511	220,506
Lard	.....	.....	.....	10,743
Lard, imitation	.....	.....	.....	.....
Meats:				
Bacon	.....	.....	.....	.....
Beef, fresh	.....	.....	.....	.....
Beef, salted	.....	.....	.....	.....
Hams	.....	.....	.....	3,647
Mutton, fresh	.....	.....	11,536	.....
Pork, fresh	.....	20,430	16	.....
Pork, salted (other than bacon and hams)	.....	.....	295	1,006
Poultry and game	100,121	21,992	178,958	7,339
Rabbits (dead)	.....	81,712	4,088	.....
Unenumerated, salt or fresh	.....	.....	65,619	1,931
Preserved, otherwise than by salting.				
Beef	.....	50,536	.....	7,236
Mutton	.....	.....	.....	.....
Other sorts (other than bacon and hams)	.....	4,875	26,269	23,168
Total Provisions	522,481	197,341	2,287,536	287,797
Seeds	12,531	19,363	208,492	372,251
Silk, unmanufactured	.....	18,324	295,194	243,579
Silk manufactures	95,600	146,222	5,633,863	2,253,555
Skins and furs, including manufactures of	14,296	186,459	851,127	1,804,521
Spirits	6,409	4,782	873,475	93,884
Starch, farina, dextrine and potato flour	39,081	118,336	24,062	270,036
Sugar and molasses	3,418,933	1,360,618	281,458	6,201,591
Tallow and stearine	.....	13,078	12,209	21,913
Tea	1,355	33	3,718	3,273
Tobacco	5,082	17,303	9,294	128,756
Toys	18,913	13,393	135,577	1,090,534
Vegetables, raw:				
Potatoes	.....	162,651	436,870	94,257
Onions	.....	25,378	32,475	2,524
Other kinds	.....	15,263	303,348	16,065
Wine	1,989	4,759	2,429,376	272,169
Wood and timber:				
Hewn	125,578	.....	725,251	415,242
Sawn	3,370	.....	45,977	217,670
Staves	.....	.....	11,425	82,653
Furniture wood and hard woods	.....	.....	40,529	60,279
Wood manufactures:				
House frames, fittings, joiners' and cabinet work	36,185	54,480	123,947	68,261
Woodware, turnery, etc	21,261	13,592	71,780	295,767
Wool	6,048	225,994	1,891,990	179,303
Woollen rags	419	59,613	194,267	308,680
Woollen and worsted yarn	.....	1,458,413	1,189,287	483,027
Woollen manufactures	54,385	238,785	3,678,411	2,096,072
All other articles imported	1,217,965	6,088,748	11,164,276	15,772,940
Totals	7,015,655	23,565,443	45,176,765	69,444,591
Parcel post (goods not liable to duty)	3,375	50,297	328,276	603,561
Total imports, 1912	7,019,030	23,615,740	45,505,041	70,048,152
Total imports, 1911	6,911,943	20,825,726	41,631,005	65,280,739
Total imports, 1910	7,511,865	19,195,974	14,283,020	61,829,590
Total imports, 1909	8,085,597	17,672,418	44,205,650	57,784,655
Total imports, 1908	7,758,478	16,241,919	41,982,729	54,959,859

In the following two pages appears an elaboration of part of the above, which goes into details and shows what manufactured goods are imported into Great Britain from Austria, Belgium, France and Germany. This should be of special interest to Canadian manufacturers who hope to sell their goods in Britain.

A Detailed Statement of Manufactured Goods Bought By United Kingdom from Austria-Hungary Belgium, France and Germany

Britain Will Buy Much of These Goods From Canada Now

YEAR ENDED DECEMBER 31st, 1912

NOTE: £=$4.86. Information for Countries marked thus (a) not available

Compiled Specially For "Industrial Canada" by the Trade and Commerce Department.

CLASSIFICATION UNITED KINGDOM BUYS.	From Austria-Hungary	From Belgium	From France	From Germany
	£	£	£	£
Carriages, wagonettes, carts, etc.:				
Cycles, other than motor cycles	.....	287	1,040	824
Cycles, parts thereof	.....	19,401	17,749	140,811
Motor cars, complete	.....	322,224	530,167	124,451
Motor cars, chassis	.....	182,866	1,131,633	217,973
Motor cars, parts thereof	.....	188,612	972,234	864,731
Motor cycles	.....	12,676	1,952	6,552
Motor cycles, parts thereof	.....	21,048	(a)	84,901
Unenumerated	.....	2,874	1,403	1,373
Unenumerated, parts thereof	.....	3,139	(a)	11,698
Total	.....	753,127	2,726,203	1,453,314
Chemical manufactures and products:				
Acetic acid other than for table use	(a)	23,232	(a)	4,938
Acetone	30,154	(a)	(a)	49,470
Bleaching materials:				
Bleaching powder	(a)	(a)	(a)	30,220
Other bleaching materials	(a)	(a)	(a)	1,809
Borax	(a)	(a)	22,936	2,078
Coal products, not dyes	(a)	4,387	1,860	118,797
Cream of tartar	(a)	(a)	171,203	119,003
Glycerine, crude		33,837	130,133	18,519
Glycerine, distilled	(a)	(a)	(a)	18,768
Muriate of ammonia	(a)	3,662	46	5,490
Potash compounds:				
Saltpetre, nit. of potash	(a)	25,273	(a)	143,613
Other sorts	(a)	23,719	54,297	420,903
Soda compounds:				
Soda bicarbonate	(a)	(a)	(a)	908
Soda, caustic	(a)	15	(a)	1,821
Soda, crystals	(a)	4,831	(a)	1,915
Soda, other sorts	(a)	12,805	27,990	87,979
Sulphuric acid	(a)	7,625	(a)	(a)
Tartaric acid	(a)	104	4,228	111,537
Unenumerated	4,010	45,530	110,576	577,813
Total	38,564	193,253	542,025	1,716,654
Cotton manufactures:				
Piece goods other than book cloth:				
Piece goods, grey unbleached	.....	50,924	236	.....
Piece goods, white, bleached	.....	3,474	3,798	39,278
Piece goods, printed	.....	45,295	93,866	393,232
Piece goods, dyed in piece	7,521	306,730	128,952	1,163,579
Piece goods, manufactured wholly or in part of dyed yarn and commonly known as colored cottons	.....	27,338	56,856	1,794
Gloves	.....	501	.....	627,249
Hosiery:				
Stockings and socks	.....	.....	.....	328,406
Other sorts	2,373	33,566	18,290	1,444,923
Lace and articles thereof except embroidery	.....	87,783	897,391	1,447,298
Ribbons	.....	52,826	.....	70,012
Trimmings	.....	132,364	126,582	723,031
Unenumerated	12 766	336 194	58 484	624.058
Total	38,915	1,076,560	1,384,482	6,868,012
Dyestuffs (other than dyewoods), substances used in tanning or dyeing):				
Dyestuffs:				
Dyes and dyestuffs obtained from coal tar:				
Alizarine and anthracene dyestuffs	.....	.....	.....	261,022
Aniline and napthalene dyestuffs	.....	10,463	.....	1,316,084
Synthetic indigo	.....	.....	.....	90,862
Other coal tar dyestuffs	.....	57	.....	266
Extracts for dyeing	1,171	3,238	55,974	9,310
Indigo	.....	.....	.....	3,412
Unenumerated	.....	.....	19,366	3,104
Tanning substances				
Bark for tanning	.....	9,353	.....	4,150
Extracts for tanning	85,923	17,519	395,760	20,606
Unenumerated	.....	.....	969	570
Total	87,094	40,630	502,069	1,709,386

CLASSIFICATION UNITED KINGDOM BUYS	From Austria-Hungary	From Belgium	From France	From Germany
	£	£	£	£
Glass:				
Window and German sheet, including shades and cylinders	9,556	582,348	2,599	162,584
Plate	.....	394,151	8,531	19,049
Flint, plain, cut or ornamented, and manufactures of flint glass, except bottles	183,459	373,227	51,478	582,866
Bottles	8,597	92,022	153,733	359,341
Manufactures unenumerated	.....	494	3,420	7,429
Total	201,612	1,442,242	219.761	1,131,269
Leather:				
Undressed (i.e., rough tanned, including rough finished):				
Hides	(a)	85,529	72,571	259,061
Skins	(a)	30,520	31,756	(a)
Dressed:				
Varnished, japanned or enamelled	.....	.....	.....	389,254
Chrome tanned (not varnished, japanned or enamelled)	32,674	13,161	92,016	1,042,849
Morocco and Russia, including imitations	(a)	(a)	(a)	(a)
Other sorts	20,503	61,304	658,185	389,368
Total	60,475	191,407	860,829	2,091,700
Leather manufactures:				
Boots and shoes	96,355	8,881	113,444	83,272
Gloves	378,700	291,307	590,657	407,374
Machinery Belting	.....	636	.....	11,667
Unenumerated	5,155	14,733	29,686	778,624
Total	480,210	315,557	733,787	1,280,937
Machinery and parts thereof:				
Prime movers (except electrical):				
Rail Locomotives	(a)	640	(a)	(a)
Road Locomotives (including steam rollers)	(a)	(a)	2,545	462
Agricultural	(a)	(a)	(a)	101
Pumping	(a)	1.516	(a)	4,022
Winding	(a)	(a)	(a)	(a)
Unenumerated	(a)	19,407	2,333	17,978
Electrical of all kinds	1,225	33,108	19,545	781,927
Not being prime movers or electrical machinery:				
Agricultural	(a)	11,948	7,775	17,957
Boilers	(a)	749	(a)	3,787
Machine tools	(a)	1,920	2,719	13,750
Mining	(a)	2,918	(a)	22,127
Sewing machines, complete	(a)	(a)	(a)	87,543
Sewing Machines, parts thereof	(a)	(a)	(a)	34,464
Textile	429	6,710	35,716	89,228
Typewriters, complete	(a)	(a)	(a)	3,801
Typewriters, parts thereof	(a)	(a)	(a)	350
Unenumerated	11,509	147,042	94,163	1,350,620
Total	13,541	230,039	182,628	2,435,917
Metals and ores and manufactures thereof:				
Antimony ore	.....	(a)	(a)	2,492
Antimony, crude and regulus	.....	(a)	(a)	6,344
Brass, bronze, and metal bronzed or lacquered, manufactures of	1,123	14,166	106,027	149,611
Copper ore	.....	12,599	23,491	5,117
Copper ore, regulus and precipitate	.....	4,050	(a)	2,817
Copper ore, old, fit only to be re-manufactured	.....	12,792	15,102	10,660
Copper ore, unwrought, in bars, blocks, slabs, cakes and ingots	.....	57,496	66,847	79,296
Copper ore, part wrought.	.....	1,591	9,053	14,581
Copper ore manufactures, unenumerated	.....	23,246	397,771	331,806
Gold ore (including the value of the gold contained in auriferous ores and metals)	.....	(a)	60,094	(a)

(Continued from page 288.)

CLASSIFICATION	From Austria-Hungary	From Belgium	From France	From Germany
	£	£	£	£
Gold, leaves of	.....	(a)	(a)	97,279
Iron ore:				
Manganiferous	.....	(a)	(a)	(a)
Other sorts	.....	15,609	117,931	7,565
Iron and steel, old (except old rails)	.....	19,292	18,592	56,486
Iron and steel and manufactures thereof:				
Iron, pig, basic	.....		.....	10,937
Iron, pig, forge and foundry	.....	9,400	.....	480
Iron, pig, hæmatite	.....		.....	119,228
Iron, pig, Spiegeleisen, ferro-manganese and ferro-silicon	.....		12,284	57,616
Puddled bars	.....	3,068	(a)	24
Castings in the rough	.....	5,754	(a)	47,547
Forgings in the rough	.....	875	(a)	17,032
Wrought, in bars, angles, rods and sections	.....	503,972	621	136,582
Iron or steel:				
Hoops and strips	.....	39,945	(a)	258,307
Tubes and pipes and fittings, wrought	.....	34,943	5,057	270,812
Pipes and fittings, cast	.....	10,636	30,129	5,236
Ship, bridge, boiler and other plates and sheets not under ⅛ in. thick	.....	197,679	(a)	283,462
Ship, bridge, boiler, and other plates and sheets under ⅛ in. thick	.....	152,610	(a)	51,084
Wire (including telegraph and telephone wire)	.....	115,265	(a)	307,226
Wire rods	.....	155,930	(a)	376,912
Wire nails	.....	254,612	635	195,144
Nails (other than wire nails), screws and rivets	.....	16,778	10,966	14,793
Bolts and nuts	.....	26,724	7,716	18,471
Rails:				
New perfect rails for use on steam or electric railways and conductor rails for electric traction	.....	53,562	(a)	24,504
Defective rails and old rails	.....	1,139	(a)	398
Tram rails, with grooved heads	.....	17,295	(a)	17,573
Railway wheels and axles (complete)	.....	8,357	(a)	8,322
Tyres and axles	.....	11,205	(a)	28,799
Manufactures of, unenumerated	.....	163,731	71,988	378,308
Steel:				
Ingots	.....	(a)	(a)	165,476
Blooms, billets and slabs	.....	478,246	4,409	1,077,143
Sheet bars and tin plate bars	.....	73,136	(a)	1,095,446
Castings, in the rough	.....	108,172	(a)	19,837
Forgings, in the rough	.....	3,658	(a)	240,119
In bars, angles and shapes other than girders, joists, etc.	.....	394,198	(a)	205,667
Girders, beams, joists and pillars	.....	183,318	29,408	461,529
Lead ore	.....	2,062	8,834	8,836
Lead, pig and sheet	.....	51,142	125,054	40,706
Manganese ore	.....	.....	.....	3,521
Platinum, wrought or unwrought	.....	(a)	311,957	15,031
Pyrites of iron and copper	.....	(a)	31,965	(a)
Quicksilver	(a)	(a)	(a)	(a)
Silver ore (including the value of the silver contained in argentiferous ores and metals)	.....	705	52,099	67
Tin ore	.....	5,431	51,047	62,340
Tin, in blocks, ingots, bars and slabs	.....	.....	6,652	47,110
Zinc ore	.....	14,019	31,779	47,742
Zinc, crude, in cakes	4,632	1,495,850	150,879	1,429,655
Zinc manufactures	.....	299,418	22,622	261,774
Ores, unenumerated	.....	530	87,998	19,550
Metal, unenumerated, unwrought	.....	55,605	237,990	332,163
Metal, unenumerated, wrought or manufactured:				
Printing type	.....	294	249	3,201
Other sorts	29,357	38,090	108,327	617,044
Metal, unenumerated, old, fit only to be re-manufactured	.....	13,662	13,254	90,483
Total	35,132	5,060,696	2,228,578	9,539,590
Oils:				
Animal	.....	22,993	9,984	6,152
Cocoanut, unrefined	.....	40,011	17,524	580,123
Cocoanut, refined	.....	124,511	587,543	490,001
Olive, unrefined	.....	.....	17,676	.....
Olive, refined	.....	.....	120,401	.....
Palm, unrefined	.....	.....	.....	190,593
Palm, refined	.....	.....	.....	87,028
Petroleum:				
Lamp oils	18,360	28,833	.....	47,277
Lubricating oils	21,442		.....	132,276

CLASSIFICATION	From Austria-Hungary	From Belgium	From France	From Germany
	£	£	£	£
Seed:				
Castor	.....	10,805	9,595	.....
Cotton seed oil, refined	.....	.....	3,813	.....
Linseed oil, pure	.....	487,781	33,741	181,474
Linseed oil, not pure	.....	224	8	.....
Rape-seed oil	.....	81,636	13,101	58,139
Other seed oils	.....	105,508	63,778	98,401
Turpentine	.....	.....	30,088	4,052
Essential:				
Natural	.....	.....	51,386	53,066
Artificial	.....	.....	1,218	15,338
Unenumerated	.....	7,865	21,336	19,715
Total	39,802	909,988	981,192	1,963,635
Paper and articles of paper:				
For printing or writing on reels	8,858	4,720	3,144	77,871
For printing or writing not on reels	4,747	96,945	38,479	253,324
Printed paper hangings	.....	35,025	9,509	85,602
Other printed or coated papers	.....	60,392	25,666	152,751
For packing and wrapping	6,648	226,024	27,907	663,266
Strawboard	.....	5,799	132	11,738
Millboard and wood pulpboard	8,062	.....	7,460	94,570
Boxes and cartons of paper or cardboard	.....	.....	4,407	16,315
Unenumerated	.....	.....	157,546	160,163
Total	28,315	428,905	274,250	1,515,600
Silk:				
Manufactures wholly of silk:				
Broadstuffs	21,853	9,718	3,806,836	84,262
Lace, and articles thereof (except embroidery):	.....	(a)	250,058	508
Ribbons	1,584	23,625	663,198	5,609
Manufactures of silk, mixed with other materials if known as "Silks":				
Broadstuffs	55,382	71,439	535,047	1,408,582
Lace and articles thereof (except embroidery:	.....	(a)	95,754	7,126
Ribbons	.....	19,181	15,343	489,210
Other manufactures of silk, or of silk mixed with other materials, if known as "silks"	17,051	21,935	267,627	258,258
Total	95,609	146,222	5,633,863	2,253,555
Skins and furs:				
Skins, goat, undressed	6,732	3,370	41,777	53,561
Skins, sheep, undressed—woolled (that is with wool left on)	.....	.....	5,892	4,851
Skins, sheep, undressed, pickled	.....	.....	20,785	.....
Furs, rabbit skins, undressed	.....	127,658	4,436	293
Furs, rabbit skins, dressed	.....	30,622	73,289	13,515
Furs, seal skins, undressed	.....	.....	42,834	.....
Skins and furs, unenumerated, undressed	.....	.....	5,599	295,699
Skins and furs, unenumerated, dressed (not leather)	.....	5,136	76,073	1,006,074
Manufactures of skins and furs (including skin rugs)	14,296	19,673	580,442	420,528
Total	21,028	186,459	851,127	1,804,521
Sugar:				
Refined or rendered by any process equal thereto:				
In lumps and loaves	376,520	428,305	63,452	362,568
Other sorts, including sugar candy	1,566,175	668,660	168,341	3,936,053
Unrefined, beetroot	.....	.....	.....	.....
Unrefined, cane and other sorts	1,476,238	261,549	31,617	1,722,817
Glucose, solid	.....	9	18,048	169,846
Glucose, liquid	.....	2,096	.....	1,297
Molasses, invert sugar, etc	.....	.....	.....	6,206
	220	.....	.....	2,894
Total	3,419,153	1,360,618	281,458	6,201,591
Woollen and worsted manufactures (of wool, or of wool mixed with other materials, if known as "Woollens" or "Worsteds"):				
Cloths	4,856	59,434	12,062	191,589
Stuffs, flannels and delains:				
Printed	42	5,112	2,508	215,700
Other sorts	12,172	66,776	3,577,359	1,011,639
Hosiery:				
Stockings and socks	(a)	.....	(a)	19,658
Other sorts	(a)	10,294	6,217	307,517
Carpets and carpet rugs	9,672	89,562	40,493	44,243
Travelling rugs, coverlets and wrappers	(a)	.....	(a)	891
Mohair braids and laces	(a)	9,655	.....	1,944
Unenumerated	26,908	28,266	39,684	302,691
Total	54,385	249,079	3,678,411	2,096,072

Exports of German Produce from Germany to France, Italy, Norway, Russia, Spain and Sweden

WHERE CAN CANADIAN GOODS BE SUBSTITUTED FOR GERMAN GOODS IN EUROPE?

Year Ended December 31st, 1913

NOTE:—Mark=23.8 Cents.

(Compiled Specially for Industrial Canada by the Trade and Commerce Department.)

CLASSIFICATION—GERMANY SOLD	TO FRANCE	TO ITALY	TO NORWAY	TO RUSSIA	TO SPAIN	TO SWEDEN
Products of agriculture and of forest and other natural animal and vegetable products, foodstuffs, etc.:	Marks	Marks	Marks	Marks	Marks	Marks
Field, garden and meadow produce:						
Cereals and rice	19,103,000	23,133,000	18,760,000	22,490,000	816,000	20,826,000
Pulse (ripe)	1,850,000	252,000	140,000	122,000	26,000	273,000
Oil fruits and oil seeds	4,984,000	810,000	244,000	3,500,000	920,000	1,506,000
Potatoes and other bulbs and roots	232,000	103,000	12,000	23,000	74,000	444,000
Green and raw fodder	16,000	3,000	2,000	19,000	6,000	....
Hops and other plants for use in commerce and industry	11,346,000	6,417,000	1,043,000	13,588,000	686,000	3,960,000
Kitchen vegetables	248,000	53,000	173,000	543,000	33,000	166,000
Live plants, floricultural produce	750,000	153,000	143,000	1,256,000	20,000	453,000
Fruits and nuts; fruits and plant juices	122,000	5,000	249,000	793,000	10,000	780,000
Chicory and other colonial products	56,000	71,000	56,000	418,000	14,000	28,000
Other vegetable products for industrial or medicinal use	618,000	1,966,000	93,000	2,160,000	238,000	402,000
Forest products	6,069,000	2,885,000	971,000	10,025,000	640,000	2,225,000
Animals and animal products	38,822,000	4,509,000	2,461,000	51,976,000	1,194,000	5,147,000
Sugar	34,000	27,000	10,595,000	66,000	104,000	550,000
Spirits, wines and other beverages	2,726,000	955,000	394,000	1,580,000	458,000	973,000
Mill produce from corn, rice and pulse	4,862,000	1,463,000	8,146,000	3,772,000	648,000	2,029,000
Products of industries connected with agriculture, N.E.S.	1,903,000	1,232,000	1,866,000	2,045,000	462,000	4,926,000
Products of factories of alimentary and consumable goods, N.E.S.	4,539,000	923,000	1,582,000	2,398,000	292,000	5,492,000
Raw mineral materials and mineral oils:						
Earths and stones	4,392,000	593,000	848,000	6,075,000	345,000	1,012,000
Ores, slags and ashes	3,467,000	120,000	73,000	233,000	13,000	263,000
Mineral fuel	105,224,000	17,346,000	2,028,000	27,920,000	3,331,000	5,818,000
Mineral oils and other raw mineral materials	601,000	630,000	406,000	919,000	276,000	1,004,000
Coal-tar, coal-tar oils and coal-tar products	10,907,000	1,583,000	93,000	4,681,000	414,000	265,000
Prepared wax, solid fatty acids, paraffine, and similar candle-making materials, candles, manufactures of wax, soap and other manufactures of grease, oil or wax	1,941,000	2,162,000	834,000	4,423,000	948,000	1,212,000
Simple chemicals, acids, salts and other combinations of simple chemicals, N.E.S.	25,692,000	10,306,000	2,501,000	22,724,000	5,013,000	10,254,000
Colors and dyestuffs	10,476,000	13,126,000	1,769,000	13,975,000	4,099,000	4,858,000
Varnishes, lacs and cements	240,000	517,000	217,000	187,000	135,000	286,000
Ether, alcohols, volatile oils, artificial scents, perfumery and cosmetics	3,200,000	1,471,000	194,000	2,549,000	656,000	440,000
Artificial manures	801,000	2,483,000	527,000	12,165,000	613,000	649,000
Explosives, ammunition and other inflammable substances	159,000	1,413,000	288,000	1,296,000	246,000	833,000
Chemical and pharmaceutical products, N.E.S.	4,156,000	4,717,000	948,000	13,363,000	1,359,000	2,121,000
Animal and vegetable textile materials and manufactures thereof; human hair; prepared ornamnetal feathers, fans and hats:						
Silk	14,363,000	11,644,000	2,329,000	7,042,000	4,061,000	5,376,000
Wool and other animal hair	16,215,000	18,876,000	8,568,000	26,815,000	1,891,000	16,789,000
Cotton	19,961,000	14,594,000	5,172,000	19,689,000	5,621,000	8,110,000
Other vegetable textile materials	1,334,000	1,169,000	1,463,000	1,621,000	424,000	1,384,000
Bookbinders' and tracing cloth, waterproof tissues, tissues covered with grinding or polishing substances, linoleum and similar materials	1,339,000	471,000	837,000	325,000	191,000	1,287,000
Wadding, felt and unsewn articles of felt	440,000	315,000	162,000	1,302,000	49,000	332,000
Horsehair (mane or tail) and articles thereof	786,000	110,000	140,000	264,000	19,000	113,000
Clothing, millinery and other sewn articles of spunwares or felt, N.E.S.	2,320,000	2,675,000	2,362,000	2,817,000	333,000	3,351,000
Artificial flowers of spunwares, umbrellas and parasols and shoes of spunwares or felt	495,000	377,000	93,000	103,000	74,000	238,000
Human hair and articles thereof, prepared ornamental feathers, fans and hats	2,115,000	1,023,000	1,357,000	911,000	75,000	1,113,000
Waste of spunwares and the like	1,835,000	4,631,000	1,621,000	6,704,000	827,000	862,000
Leather and leatherwares, furriers' wares and manufactures of gut	85,302,000	29,570,000	4,142,000	59,390,000	4,362,000	8,285,000
India-rubber wares	15,940,000	8,595,000	1,313,000	5,326,000	2,083,000	2,585,000
Plaits, and plaited wares of vegetable materials, except textile fibres	448,000	209,000	105,000	146,000	95,000	233,000
Brooms, brushes and sieves	192,000	596,000	200,000	571,000	291,000	257,000
Cork wares and wooden wares	3,756,000	3,027,000	1,034,000	6,501,000	626,000	1,339,000
Articles of animal or vegetable materials for carving or moulding, N.E.S.	6,950,000	5,303,000	955,000	6,687,000	809,000	1,403,000
Paper, cardboard and manufactures of	16,553,000	9,290,000	2,370,000	8,572,000	4,002,000	3,606,000
Books, pictures and paintings	6,690,000	2,378,000	612,000	7,781,000	641,000	1,748,000
Wares of stones or other mineral substances (except earthenware) and of fossil substances	3,353,000	1,259,000	292,000	2,397,000	369,000	447,000
Earthenware	9,445,000	3,952,000	1,183,000	7,671,000	1,154,000	1,224,000
Glass and glassware	8,014,000	6,146,000	996,000	8,519,000	1,304,000	2,082,000
Metals and wares thereof:						
Gold and silver	5,520,000	8,940,000	405,000	9,897,000	974,000	868,000
Iron and alloys thereof	55,638,000	70,808,000	19,078,000	66,818,000	15,559,000	19,746,000
Aluminum and alloys thereof	505,000	651,000	316,000	2,020,000	185,000	324,000
Lead and alloys thereof	620,000	695,000	474,000	3,244,000	301,000	803,000
Zinc and alloys thereof	373,000	1,738,000	4,231,000	7,717,000	148,000	1,890,000
Tin and alloys thereof	4,029,000	1,425,000	169,000	2,671,000	1,096,000	458,000
Nickel and alloys thereof	886,000	390,000	29,000	1,670,000	27,000	105,000
Copper and alloys thereof	18,384,000	11,898,000	3,912,000	16,616,000	6,714,000	5,217,000
Other metals and alloys thereof	6,082,000	4,962,000	1,803,000	11,442,000	2,205,000	2,277,000
Machinery, Etc.:						
Machinery	71,546,000	38,390,000	7,588,000	96,688,000	17,059,000	9,545,000
Electro-technical apparatus	9,870,000	17,963,000	6,908,000	27,549,000	10,460,000	9,081,000
Vehicles and vessels	15,042,000	7,474,000	2,044,000	17,090,000	1,467,000	2,403,000
Firearms	108,000	209,000	38,000	838,000	15,000	55,000
Clocks and watches	2,135,000	651,000	256,000	2,246,000	513,000	599,000
Musical instruments	1,821,000	2,988,000	1,234,000	7,782,000	355,000	1,140,090
Toys	6,573,000	2,124,000	302,000	2,405,000	995,000	776,000
All other articles exported	2,921,000	2,419,000	965,000	1,718,000	1,481,000	689,000
Total Exports, 1912	689,125,000	401,162,000	144,744,000	679,829,000	112,944,000	197,415,000
Total Exports, 1911	598,553,000	347,957,000	124,344,000	625,390,000	88,445,000	191,627,000
Total Exports, 1910	543,413,000	323,519,000	119,912,000	547,064,000	71,649,000	190,520,000
Total Exports, 1909	455,123,000	288,978,000	104,452,000	444,482,000	69,145,000	156,240,000
Total Exports, 1908	438,125,000	311,298,000	96,965,000	450,221,000	65,878,000	174,071,000

DETAILED STATEMENT OF WHAT CANADA BUYS FROM GERMANY

How Much Can Be Made in Our Factories?

In the September issue of INDUSTRIAL CANADA we published a summary of the goods Canada imports from Germany. Other summaries have appeared also, but we believe that the following is the only detailed statement of the various classes and kinds of German goods brought into this country. It is for the fiscal year ending March 31st, 1914, and was specially compiled for INDUSTRIAL CANADA by the Trade and Commerce Department, Ottawa.

Ale, beer and porter—dutiable	$35,984
Animals, living—dutiable	
Animals, living—free	
Articles and other goods, the produce of Canada, re-imported within five years—free	2,911
Articles for the personal or official use of Consuls General, etc.—free	3,696
Asphaltum or asphalt, solid—free	9,259
Baskets of all kinds, N.O.P.—dutiable	22,931
Belts of all kinds, N.O.P., except silk—dutiable	235
Blast furnace slag—free	657
Books, periodicals, etc.—	
Bibles, prayer books, psalm and hymn books, etc.—free	4,862
Books, printed, periodicals and pamphlets or parts thereof, N.O.P.—dutiable	5,735
Books not printed or reprinted in Canada, for use of colleges, etc., free libraries, etc., and law societies and being the property of the organized authorities of such library and not in any case the property of individuals—free	6,205
Books on the application of science to industries of all kinds, also books printed in any language other than the English and French language, or in any two languages, not being English or French, or in any three or more languages—free	7,891
Labels for cigar boxes, fruits, vegetables, meats, fish, confectionery and other goods and wares; also shipping, price or other tags, tickets or labels; and railroad or other tickets whether lithographed or printed or partly printed, N.O.P.—dutiable	35,884
Pamphlets, advertising pictorial show cards, illustrated advertising periodicals, illustrated price books, catalogues and price lists; advertising calendars and almanacs; patent medicine or other advertising circulars, fly sheets or pamphlets—dutiable	19,395
Other books, etc.—dutiable	10,536
Other books, etc.—free	328
Total books, etc.—dutiable	71,550
Total books, etc.—free	19,286
Boots and shoes and slippers of all kinds, except rubber and leather—dutiable	$25,658
Breadstuffs—dutiable	98,297
Breadstuffs—free	
Bricks, clays and tiles—dutiable	1,482
Bricks, clays and tiles—free	2,735
Bristles—free	12,891
Brooms and brushes—dutiable	45,276
Buttons—dutiable	83,625
Buttons—free	3,160
Candles—dutiable	969
Carpets, mats and rugs—dutiable	551
Carriages, etc.—	
Cars, railway, parts of—dutiable	6,183
Other carriages, etc.—dutiable	352
Total carriages, etc.—dutiable	6,535
Celluloid, manufactures of, N.O.P.—dutiable	8,037
Celluloid, xylonite or xyolite in sheets, lumps, blocks, rods or bars, not further manufactured than moulded or pressed—dutiable	211
Celluloid, xylonite or xyolite in sheets, lumps, blocks, rods or bars, not further manufactured than moulded or pressed—free	10,078
Cement.—	
Portland—dutiable	856
Other cement—dutiable	29
Total cement—dutiable	885
Clocks, time recorders, clock and watch keys, clock movements and clock cases—dutiable	129,790
Coal, coke, etc.—dutiable	27
Coal, coke, etc.—free	
Cocoa, beans, nibs, paste, chocolate and preparations of—dutiable	80,675
Cocoa, beans, nibs, paste, chocolate and preparations of—dutiable	80,675
Cocoa, beans, nibs, paste, chocolate and preparations of—free	
Coir and coir yarn—free	4,842
Collars and cuffs—dutiable	4,267
Combs—dutiable	60,531
Cordage, rope and twine—dutiable	1,108
Cordage, rope and twine—free	
Cotton and mfrs. of.—	
Clothing,—	
Blouses and shirtwaists—dutiable	$3,333
Shawls—dutiable	2,104
Shirts—dutiable	486
Socks and stockings—dutiable	400,740
Undershirts and drawers—dutiable	1,962
Other clothing, N.O.P.—dutiable	64,660
Embroideries, white and cream—dutiable	29,050
Fabrics:—	
Belting of all kinds, except rubber and leather—dutiable	5,392
Bookbinders' cloth—free	2,925
Gray, unbleached—dutiable	1,223
Printed, dyed or colored, N.O.P.—dutiable	88,987
Velvets, velveteens and plush, N.O.P.—dutiable	33,073
White or bleached—dutiable	8,641
Lace, white or cream-colored	107,822
Sheets, bed quilts, pillow cases and damask of cotton in the piece, including uncolored table cloths or napkins of cotton—dutiable	31,717
Thread, sewing, in hanks—dutiable	773
Thread, sewing, on spools—dutiable	25,027
Yarn, knitting, hosiery or other cotton yarns—dutiable	1,553
Yarn, No. 40 and finer—free	2,732
Yarn, polished or glazed, when imported by manufacturers of shoe laces—free	294
Other cottons, etc.—dutiable	87,234
Other cottons, etc.—free	
Total cotton and mfrs. of—dutiable	893,777
Total cotton and mfrs. of—free	5,951
Curtains and shams—dutiable	1,228
Drugs, dyes, chemicals, etc.—	
Acids—dutiable	11,795
Acids—free	13,357
Alum in bulk only, ground or unground, and alum cake—dutiable	22,001
Ammonia, nitrate of—free	9,645
Aniline and coal tar dyes, soluble in water, in packages of not less than 1 lb. weight, including alizarine and artificial alizarine—free	223,871
Antimony salts, viz.: Tartar emetic, chlorine and lactate (antimonine)—free	157
Arsenic, sulphide of—free	891
Chloride of lime and hypo-chlorite of lime, in packages of not less than 25 lbs.—free	4,316
Cyanade of potassium, cyanide of sodium and cyanogen bromide for reducing metals in mining operations—free	204
Dextrine, dry—dutiable	6,140
Dyeing or tanning articles in a crude state, used in dyeing or tanning, N.O.P.—free	5,559
Gelatine and isinglass—dutiable	11,270
Glycerine, crude, for the manufacture of refined glycerine—free	59,577
Glycerine for the manufacture of explosives..—free	9,353
Glycerine, N.O.P.—dutiable	
Indigo—free	
Indigo, paste and extract of—free	20,388
Medicinal, chemical and pharmaceutical preparations, including proprietary preparations—dutiable	59,512
Potash, bichromate of, crude—free	808
Potash, muriate and sulphate of—free	74,227
Potash, nitrate of, or saltpetre—free	25,708
Potash, red and yellow prussiate of—free	7,259
Quinine, salts of—free	617
Sal ammoniac—free	14,834
Soda, bi-chromate of—free	2,373
Soda, nitrate of, or cubic nitre—free	8,568
Soda, prussiate and sulphite of—free	
Sodium, sulphide of—free	3,644
Sulphuric ether, chloroform and solution of peroxides of hydrogen—dutiable	3,821
Tartaric and crystals—free	42,333
Other drugs, etc.—dutiable	112,847
Other drugs, etc.—free	30,777
Total drugs, etc.—dutiable	$227,386
Total drugs, etc.—free	558,466
Earthenware and chinaware:—	
China and porcelain ware, N.O.P.—dutiable	7,184
C. C. or cream-colored ware, decorated, printed or sponged, and all earthenware, N.O.P.—dutiable	23,420

Table ware of china, porcelain, white granite or ironstone—dutiable	$259,123
Other earthenware, etc.—dutiable	10,868
Total earthenware, etc.—dutiable	$300,595
Electric apparatus:—	
Carbons, electric light, and carbon points, of all kinds—dutiable	$43,308
Carbons, electric light, and carbon points, of all kinds—free	
Electric apparatus, N.O.P., insulators of all kinds, etc., electric and galvanic batteries, telegraph and telephone instruments—dutiable	141,252
Electric motors, generators, dynamos and sockets—dutiable	15,700
Other electric apparatus—dutiable	4,128
Other electric apparatus—free	
Total electric apparatus—dutiable	$204,388
Total electric apparatus—free	
Embroideries, N.O.P.—dutiable	$18,618
Fancy goods:—	
Bead ornaments—dutiable	3,182
Boxes, fancy ornamental cases and writing desks, etc.—dutiable	81,066
Braids, bracelets, cords, etc.—dutiable	76,768
Cases for jewellery, watches, silverware, platedware and cutlery—dutiable	38,102
Feathers, fruits, grains, leaves and flowers, artificial, suitable for ornamental hats—dutiable	121,033
Feathers, fancy, undressed—dutiable	23,915
Feathers, fancy, N.O.P., and manufactures of feathers, N.O.P.—dutiable	32,223
Lace, lace collars and similar goods, etc.—dutiable	156,100
Statues and statuettes of any material—dutiable	14,464
Toys and dolls of all kinds—dutiable	581,009
Other fancy goods—dutiable	12,131
Total fancy goods—dutiable	$1,139,993
Feathers, bed and other, N.O.P.—dutiable	$8,351
Fertilizers—free	2,448
Flax, hemp, jute and mfrs. of:—	
Carpeting, rugs, matting and mats of hemp or jute—dutiable	591
Damask of linen, uncolored, in the piece, stair linen, diaper, doylies, tray cloths, uncolored table cloths or napkins of linen, quilts, counterpanes, pillow cases of linen and sheets—dutiable	35,876
Fabrics, brown or bleached, unbleached, printed, dyed or colored—dutiable	4,915
Hemp, dressed or undressed—free	
Towels—dutiable	11,912
Other flax, etc.—dutiable	11,523
Other flax, etc.—free	5,568
Total flax, hemp, jute, etc.—dutiable	$64,817
Total flax, hemp, jute, etc.—free	5,568
Furs and mfrs. of:—	
Fur skins, wholly or partially dressed—dutiable	$206,461
Fur skins of all kinds, not dressed in any manner, N.O.P.—free	411,607
Other furs, etc.—dutiable	49,199
Other furs, etc.—free	
Total furs and mfrs. of—dutiable	$255,660
Total furs and mfrs. of—free	411,607
Glass and mfrs. of:—	
Common and colorless window glass—dutiable	$2,708
German looking glass (tin plate) unsilvered or for silvering—dutiable	56
Glass balls and cut, pressed or moulded crystal glass tableware, blown glass tableware, and other cut glassware—dutiable	55,095
Glass carboys or demijohns, bottles, decanters, flasks or phials—dutiable	81,114
Lamp chimneys, glass shades or globes—dutiable	49,492
Plain, colored, opaque, stained or tinted or muffled glass in sheets—dutiable	1,509
Plate glass, not bevelled, in sheets or panes—dutiable	7,081
Silvered glass, bevelled or not, framed or not framed—dutiable	30,577
Other glass, etc.—dutiable	48,589
Other glass, etc.—free	
Total glass and mfrs. of—dutiable	$276,221
Total glass and mfrs. of—free	
Gloves and mitts—dutiable	$385,843
Glue, glue stock and mucilage:—	
Glue, powdered or sheet—dutiable	$35,780
Other glue, etc.—dutiable	2,600
Other glue, etc.—free	
Total glue, etc.—dutiable	$38,380
Total glue, etc.—free	
Grasses, fibres and straw and mfrs. of—dutiable	$7,555
Grasses, fibres and straw and mfrs. of—free	1,534
Grease—dutiable	367
Grease—free	10,146
Gunpowder, explosives, etc.—dutiable	51,698
Gutta-percha, India-rubber and mfrs. of:—	
Rubber and gutta-percha, crude caoutchouc or India-rubber unmanufactured—free	50,558
Other gutta-percha, etc.—dutiable	$96,895
Other gutta-percha, etc.—free	3,492
Total gutta-percha, etc.—dutiable	$96,895
Total gutta-percha, etc.—free	54,050
Hair and mfrs. of—dutiable	$3,040
Hair and mfrs. of—free	5,644
Hats, caps and bonnets—dutiable	72,173
Hats, caps and bonnets—free	48,057
Hides and skins, other than fur—free	176,641
Hops—dutiable	63,413
Ivories, piano key—free	93,553
Jewellery—dutiable	151,560
Laces, boot, shoe, shirt and stay—dutiable	1,152
Leather and mfrs. of:—	
Calf, kid or goat, lamb and sheep skins, dressed, waxed or glazed—dutiable	$1,421
Glove leathers, tanned or dressed, colored or uncolored, for the manufacture of gloves—dutiable	23,675
Japanned, patent or enamelled leather and Morocco leather and leather in imitation of Morocco leather—dutiable	1,684
Skins for Morocco leather, tanned, but not further manufactured—dutiable	
Upper leather, including dongola, cordovan, kangaroo, alligator and all leather, dressed, waxed or glazed, or further finished than tanned, N.O.P., and chamois skins—dutiable	2,206
Other unmanufactured leather—dutiable	8,013
Boots and shoes—dutiable	20,406
Other manufactures of leather—dutiable	3,682
Total leather and mfrs. of—dutiable	$60,691
Magic lanterns and slides therefor—dutiable	$5,374
Metals and minerals and mfrs. of:—	
Brass and mfrs. of—dutiable	$71,336
Brass and mfrs. of—free	59,053
Copper and mfrs. of—dutiable	1,620
Copper and mfrs. of—free	50,586
Gold and silver and mfrs. of:—	
Gold, silver and aluminum leaf, Dutch or schlag metal leaf—dutiable	$31,359
Other gold, etc.—dutiable	27,244
Other gold, etc.—free	
Total gold, etc.—dutiable	$58,603
Total gold, etc.—free	
Iron and steel and mfrs. of:—	
Angles, beams, channels and other rolled shapes of iron or steel, not punched, drilled or further manufactured than rolled, weighing not less than 35 lbs. per lineal yard, not being square, flat, oval or round shapes, and not being railway bars or rails—dutiable	$59,634
Angles, beams, channels, girders, tees and other rolled shapes or sections, not punched, drilled or further manufactured than rolled, N.O.P.—dutiable	25,504
Axle and axle parts, N.O.P., and axle blanks and parts thereof, of iron or steel, for railway, tramway or other vehicles—dutiable	2,113
Balls, steel, adapted for use on bearings of machinery and vehicles—dutiable	1,757
Bars, bands, hoops, scroll or strip, sheet or plate, rolled, or cast steel of any size, thickness or width, galvanized or coated with any material or not, and steel blanks for the manufacture of milling cutters, when of greater value than 3½ cts. per lb.—dutiable	17,263
Billets, of iron or steel, weighing not less than 60 lbs. per lineal yard—dutiable	68,728
Cutlery:—	
Pen-knives, jack-knives and pocket-knives of all kinds—dutiable	28,544
Knives and forks of steel, plated or not, N.O.P.—dutiable	58,957
All other cutlery, N.O.P.—dutiable	292,389
Ferro-silicon, spiegeleisen and ferro-manganese—dutiable	194,999
Gas-buoys—Articles for the manufacture of—free	2,299
Guns, rifles, including air guns and air rifles (not being toys), muskets, cannons, pistols, revolvers or other firearms—dutiable	31,623
Hoop, band, scroll or strip, rolled—dutiable	11,851
Ingots, cogged ingots, blooms, slabs, puddled bars, and loops or other forms, N.O.P., less finished than iron or steel bars but more advanced than pig-iron, except castings—dutiable	
Locks of all kinds—dutiable	4,354
Machinery:—	
Carding, spinning, weaving or braiding machinery, of a class or kind not made in Canada—dutiable	30,881
Printing presses—dutiable	14,247
Ruling, folding, binding, embossing, creasing or cutting machinery, when for use exclusively by printers, book-binders and by manufacturers of articles made from paper or cardboard, including parts thereof—dutiable	8,461
Sewing machines—dutiable	3,713
Well-drilling and apparatus of a class or kind not made in Canada for drilling for water, natural gas or oil and for prospecting for minerals, not including motive power—free	
Other machinery—dutiable	185,938

Other machinery—free	$9,449
Total machinery—dutiable	$243,240
Total machinery—free	9,449
Plates not less than 30 inches in width and not less than ¼ inch in thickness, N.O.P.—dutiable	$10,711
Plate, steel, universal mill or rolled edge plates over 12 inches wide, imported by manufacturers of bridges or of structural work or for use in car construction—dutiable	15,312
Pumps, hand, N.O.P.—dutiable	21,279
Rails for railways and tramways—dutiable	2,289
Skates of all kinds, roller or other, and parts thereof—dutiable	42,886
Skelp, sheared or rolled in grooves, for the manufacture of wrought iron or steel pipe—dutiable	
Stoves of all kinds, for coal, wood, oil, spirits or gas—dutiable	9,408
Surgical and dental instruments of metal and surgical needles, surgical operating tables for use in hospitals, X-ray apparatus and parts thereof, and microscopes valued at not less than $50 each by retail	42,981
Tires, locomotive and car wheel of steel in the rough —free	348,059
Tools and implements—dutiable	66,724
Tubing—dutiable	247,887
Tubing—free	291,243
Ware—Agate, granite or enamelled iron and steel ware, also iron or steel hollow-ware, etc.—dutiable	93,037
Wire—dutiable	52,877
Wire—free	87,646
Wire rods, rolled, round, in the coil, not over ⅜-inch in diameter, for making wire in the coil—free	51,574
Other iron and steel, etc.—dutiable	272,098
Other iron and steel, etc.—free	116,185
Total iron and steel and mfrs. of—dutiable	$1,875,464
Total iron and steel and mfrs. of—free	949,436
Lead and mfrs. of—dutiable	$7,026
Lead and mfrs. of—free	3,415
Tin and mfrs. of—dutiable	11,411
Tin and mfrs. of—free	18,352
Zinc and mfrs. of—dutiable	319
Zinc and mfrs. of—free	108,417
Miscellaneous metals and minerals and mfrs. of:—	
Aluminum in ingots, blocks, bars, rods, strips, sheets or plates—free	$37,497
Aluminum, manufactures of, N.O.P.—dutiable	18,728
Asbestos, in any form other than crude and all manufactures of—dutiable	5,599
Buckles and clasps of iron, steel, brass or copper, of all kinds, N.O.P. (not being jewellery)—dutiable	3,913
Frames, not more than 10 in. in width, clasps and fasteners, for the manufacture of purses and chatelaine bags or reticules—dutiable	1,718
Gas, coal oil or other lighting fixtures, including electric light fixtures or parts thereof of metal, lava or other tips, burners, collars, galleries, shades and shade holders—dutiable	17,735
German, Nevada and nickel silver, manufactures of, not plated—dutiable	656
Lamps, side lights and head lights, lanterns, chandeliers—dutiable	137,710
Nickle-plated ware, N.O.P.—dutiable	31,425
Pins, N.O.P.—dutiable	3,933
Ribs of brass, iron or steel, runners, rings, caps, notches, ferrules, mounts and sticks or cane in the rough, or not further manufactured than cut into lengths for umbrellas, parasols, sunshades or walking-sticks—free	23,459
Other miscellaneous metals, etc.—dutiable	17,230
Other miscellaneous metals, etc.—free	298
Total miscellaneous metals, etc.—dutiable	$238,657
Total miscellaneous metals, etc.—free	61,254
Total metals and minerals, and mfrs. of—dutiable	$2,264,436
Total metals and minerals, and mfrs. of—free	1,250,513
Mineral and aerated waters—dutiable	$38,122
Musical instruments:—	
Brass band instruments and bagpipes—dutiable	$2,604
Phonographs, graphophones, gramaphones and finished parts thereof, including cylinders and records therefor—dutiable	12,438
Pianos—dutiable	9,433
Pianos, parts of—dutiable	11,560
Piano and organ parts:—Key pins, damper springs, jack springs, rail spring, regulating screws, spoons, bridle wires, damper wires, back check wires, dowel wires, German centre pins, brass pins, rail hooks, brass brackets, etc., etc.—free	12,485
Other musical instruments—dutiable	141,956
Other musical instruments—free	
Total musical instruments—dutiable	$177,991
Total musical instruments—free	12,485
Oilcloth—dutiable	$8,708
Oils—dutiable	29,429
Oils—free	6,376
Optical instruments, etc.—dutiable	64,052
Optical instruments, etc.—free	33,078
Packages and parcels—dutiable	160,659
Paintings in oil or water colors, prints, engravings, drawings, building plans, photographs and pictures, N.O.P.—dutiable	119,443
Paintings in oil or water colors, prints, engravings, drawings, building plans, photographs and pictures, N.O.P.—free	$2,634
Paints and colors:—	
Brocade and bronze powders—dutiable	$9,815
Colors, dry, N.O.P.—dutiable	
Gold liquid paints—dutiable	1,698
Lead, red, dry, and orange mineral—dutiable	17,485
Liquid fillers, anti-corrosive and anti-fouling paints, and ground and liquid paints, N.O.P.—dutiable	2,274
Litharge—free	30,935
Metallic colors, viz.: Oxide of cobalt, tin and copper, N.O.P.—free	10,631
Ochres, ochery earths, siennas and umbers—dutiable	1,251
Oxides, fire proofs, rough stuffs, fillers, dry colors—dutiable	16,542
Ultramarine blue, dry or in pulp—free	2,257
Zinc, white, dutiable	105,872
Other paints and colors—dutiable	
Other paints and colors—free	1,176
Total paints and colors—dutiable	$154,938
Total paints and colors—free	44,999
Paper and mfrs. of:—	
Hangings of wall paper, including borders—dutiable	$17,595
Paper, photographic, plain basic, baryta coated, adapted for the manufacture of albumenized or sensitized paper—free	14,260
Printing paper—dutiable	7,987
Ruled and bordered and coated papers; boxed papers; and papeteries—dutiable	23,678
Wrapping paper—dutiable	17,341
Other paper, etc.—dutiable	268,464
Other paper, etc.—free	862
Total paper and mfrs. of—dutiable	$335,065
Total paper and mfrs. of—free	15,122
Pencils, lead—dutiable	$79,345
Pens, penholders and rulers of all kinds—dutiable	5,172
Perfumery—dutiable	28,445
Picture and photograph frames of any material—dutiable	5,061
Plants and trees—dutiable	2,523
Plants and trees—free	72,670
Pocket-books, portfolios, purses, reticules, satchels, card cases, fly-books and musical instrument cases—dutiable	95,328
Precious stones and imitations of all kinds—dutiable	35,530
Precious stones and imitations of all kinds—free	1,017
Provisions—dutiable	16,672
Rags—free	11,057
Rennet, raw and prepared—free	2,417
Ribbons—dutiable	23,284
Seeds—dutiable	13,312
Seeds—free	38,342
Settlers' effects—free	215,640
Silk and mfrs. of:—	
Clothing:—	
Shawls—dutiable	$815
Socks and stockings—dutiable	47,316
Other clothing, N.O.P.—dutiable	49,181
Fabrics:—	
Bolting cloth not made up—free	15
Fabrics for the manufacture of neckties—dutiable	48,018
Velvets, velveteens, plush, N.O.P.—dutiable	31,396
Other fabrics—dutiable	74,327
Other silk, etc.—dutiable	4,400
Other silk, etc.—free	340
Total silk and mfrs. of—dutiable	$255,453
Total silk and mfrs. of—free	355
Slate and mfrs. of—dutiable	$6,077
Soap—dutiable	6,654
Spirits and wines:—	
Spiirts—dutiable	$6,355
Wines, non-sparkling—dutiable	21,087
Wines, non-sparkling—dutiable	
Total spirits and wines—dutiable	$38,943
Stone and mfrs of—dutiable	$6,294
Stone and mfrs. of—free	21,967
Sugar, molasses, etc.:—	
Sugar above No. 16 D.S. in color—dutiable	
Sugar N.O.P., not above No. 16 D.S. in color—dutiable	999,349
Other sugar, etc.—dutiable	2,367
Total sugar, molasses, etc.—dutiable	1,001,716
Tar—free	$3,081
Tobacco and mfrs. of:—	
Tobacco, unmanufactured—free	$262,802
Other tobacco—dutiable	10,135
Other tobacco—free	
Total tobacco and mfrs. of—dutiable	$10,135
Total tobacco and mfrs. of—free	262,802
Tobacco pipes of all kinds, pipe mounts, cigar and cigarette holders, and cases for same, smokers' sets and cases therefor and tobacco pouches—dutiable	$ 24,120

Trunks, valises, hat-boxes, carpet-bags, satchels, tool-bags or baskets, portmanteaus, fly-books and parts thereof, N.O.P.—dutiable	$1,302
Umbrellas, parasols and sunshades—dutiable	3,472
Vegetables—dutiable	2,066
Watches and parts of—dutiable	21,191
Wax and mfrs. of—dutiable	15,374
Webbing—dutiable	3,799
Wood and mfrs. of:—	
Furniture, viz.:—House, office, cabinet or store furniture of wood, iron or other material, in parts or finished—dutiable	$6,873
Other wood, etc.—dutiable	44,685
Other wood, etc.—free	2,587
Total wood and mfrs. of—dutiable	$51,558
Total wood and mfrs. of—free	2,587
Wool and mfrs. of:—	
Carpets—dutiable	$69,827
Clothing:—	
Knitted goods, including knitted underwear, N.O.P. dutiable	98,399
Outside garments for women and children—dutiable	101,299
Shawls—dutiable	6,901
Skirts—dutiable	216
Socks and stockings—dutiable	55,823
Undershirts and Drawers, N.O.P.—dutiable	12,076
Other clothing, N.O.P.—dutiable	155,949
Fabrics:—	
Cassimeres, cloths and doeskins—dutiable	54,995
Coatings and overcoatings—dutiable	17,824
Dress goods, coat linings, Italian cloths, alpacas, orleans, cashmeres, henriettas, serges, buntings, nun's cloth, bengalines, whip cords, twills, plains, or jacquards of similar fabrics, composed wholly or in part of wool, worsted, the hair of the camel, alpaca, goat or like animal, not exceeding in weight six ounces to the sq. yard, to be dyed or finished in Canada—dutiable	
Felt cloth, N.O.P.—dutiable	$966
Flannels, plain, not fancy—dutiable	1,095
Italian lining, cobourgs, lustres, mohairs and alpacas—dutiable	348
Tweeds—dutiable	18,369
Other fabrics and mfrs., N.O.P.—dutiable	233,083
Felt, pressed, of all kinds, not filled or covered by or with any woven fabric—dutiable	66,571
Wool and the hair of the camel, alpaca, goat and other like animal, not further prepared than washed, N.O.P.—free	31,754
Yarns—dutiable	57,646
Yarns—free	
Other wool and mfrs of—dutiable	11,511
Other wool and mfrs. of—free	313
Total wool and mfrs.—dutiable	$972,898
Total wool and mfrs.—free	32,067
All other articles imported—dutiable	$89,832
All other articles imported—free	37,482

RECAPITULATION.

Imports—dutiable	$11,176,198
Imports—free	3,509,871
Total imports (mdse.)	$14,686,069
Coin and bullion	
Total imports	$14,686,069
Total exports	4,433,736
Total trade	$19,119,805

THE PRINCIPAL ARTICLES IMPORTED INTO CANADA FROM AUSTRIA-HUNGARY

YEAR ENDED MARCH 31st, 1914

Canadian Manufacturers are Trying to Supply Canadians with These Goods Now

Compiled for "Industrial Canada" by Trade and Commerce Department, Ottawa

Ale, beer and porter—dutiable	$2,575
Belts of all kinds, N.O.P., except silk—dutiable	5
Books, periodicals, etc.—dutiable	123
Books, periodicals, etc.—free	9,315
Boots, shoes, slippers and insoles of all kinds, except rubber and leather—dutiable	2,900
Breadstuffs—dutiable	126,896
British gum, dry sizing cream and enamel sizing—dutiable	
Broom corn—free	1,050
Brooms and brushes—dutiable	1,604
Buttons—dutiable	69,574
Buttons—free	
Clocks—dutiable	199
Collars and cuffs—dutiable	30,933
Combs—dutiable	1,681
Cordage, rope and twine—dutiable	2,417
Cordage, rope and twine—free	
Cotton and mfrs. of—dutiable	47,517
Cotton and mfrs. of—free	595
Curtains—dutiable	128
Drugs, dyes, chemicals, etc.—dutiable	4,040
Drugs, dyes, chemicals, etc.—free	17,724
Earthenware and chinaware:—	
China and porcelain ware—dutiable	$441
C. C. or cream-colored ware, decorated, printed or sponged, and all earthenware, N.O.P.—dutiable	2,318
Tableware of china, porcelain white granite or ironstone ware—dutiable	70,957
Other earthenware, etc.—dutiable	1,118
Total earthenware, etc.—dutiable	$74,834
Electric apparatus—dutiable	$21,767
Embroideries, N.O.P.—dutiable	642
Fancy goods:—	
Bead ornaments—dutiable	$251
Boxes, fancy ornamental cases and writing desks, etc.—dutiable	1,420
Braids, cords, fringes, tassels, N.O.P.—dutiable	5,750
Feathers, fruits, grains, leaves and flowers, artificial, suitable for ornamenting hats—dutiable	5,563
Feathers—dutiable	5,311
Lace, lace collars and similar goods, etc.—dutiable	4,662
Statues and statuettes—dutiable	1,538
Toys and dolls of all kinds—dutiable	5,615
Other fancy goods—dutiable	2,000
Total fancy goods—dutiable	$32,200
Fisheries, articles for the use of—free	$1,059
Flax, hemp, jute and mfrs. of—dutiable	7,416
Flax, hemp, jute and mfrs. of—free	
Fruits—dutiable	10,536
Fruits—free	
Furs and mfrs. of—dutiable	$1,673
Furs and mfrs. of—free	6,095
Glass and mfrs. of:—	
Balls, and cut, pressed or moulded crystal glass tableware, blown glass, tableware, and other cut glassware—dutiable	36,466
Carboys or demijohns, bottles, decanters, flasks, jars and phials—dutiable	2,486
Lamp-chimneys, glass shades or globes—dutiable	22,708
Silvered glass, bevelled or not, framed or not framed—dutiable	603
Other glass and mfrs. of—dutiable	19,284
Other glass and mfrs. of—free	
Total glass and mfrs. of—dutiable	$81,547
Total glass and mfrs. of—free	
Gloves and mitts—dutiable	$52,283
Glue, glue stock and mucilage—dutiable	10,667
Grasses, fibres and mfrs. of—dutiable	
Grasses, fibres and mfrs. of—free	
Gutta-percha and mfrs. of—dutiable	15,033
Gutta-percha and mfrs. of—free	
Hair—dutiable	297
Hair—free	
Hats, caps, etc.—dutiable	37,776
Hats, caps, etc.—free	
Hides and skins other than fur—free	
Hops—dutiable	93,117
Jewellery—dutiable	57,330
Laces, boot, shoes, shirt and stay—dutiable	
Leather and mfrs. of—dutiable	7,064
Metals and minerals and mfrs. of:—	
Brass and mfrs. of—dutiable	$1,730
Brass and mfrs. of—free	3,367
Gold and silver and mfrs. of—dutiable	1,413
Iron and steel and mfrs. of:—	
Agricultural implements—dutiable	$769
Machinery—dutiable	16,869
Machinery—free	
Ware—Agate, granite or enamelled iron and steel ware, also iron or steel hollow ware, etc.—dutiable	23,037
Other iron and steel and mfrs. of—dutiable	10,849
Other iron and steel and mfrs. of—free	448
Total iron and steel and mfrs. of—dutiable	$51,584
Total iron and steel and mfrs. of—free	448
Lead and mfrs. of—dutiable	$1,547
Lead and mfrs. of—free	
Tin and mfrs. of—dutiable	563
Tin and mfrs. of—free	
Zinc and mfrs. of—dutiable	81
Zinc and mfrs. of—free	

Miscellaneous metals and minerals and mfrs. of:—	
Lamps, side lights and head lights, lanterns, chandeliers—dutiable	$177,078
Nickel-plated ware, N.O.P.—dutiable	1,263
Other metals and minerals and mfrs. of—dutiable	14,589
Other metals and minerals and mfrs. of—free	4,332
Total metals and minerals and mfrs. of—dutiable	$249,848
Total metals and minerals and mfrs. of—free	8,147
Mineral and aerated waters—dutiable	$4,772
Mineral and aerated waters—free	
Musical instruments—dutiable	17,977
Musical instruments—free	
Optical instruments, etc.—dutiable	729
Optical instruments, etc.—free	79
Packages and parcels—dutiable	25,116
Paintings, drawings, etc.—dutiable	819
Paintings, drawings, etc.—free	282
Paints and colors—dutiable	49
Paints and colors—free	
Paper and mfrs. of—dutiable	25,228
Paper and mfrs. of—free	
Pencils, lead—dutiable	15,797
Precious stones and imitations of—dutiable	8,319
Precious stones and imitations of—free	93
Provisions—dutiable	1,594
Ribbons—dutiable	355
Seeds—dutiable	
Seeds—free	1,870
Settlers' effects—free	16,557
Silk and mfrs. of:—	
Clothing—dutiable	$1,933
Fabrics—dutiable	224,608
Other silk and mfrs. of—dutiable	234
Other silk and mfrs. of—free	2,154
Total silk and mfrs. of—dutiable	$226,775
Total silk and mfrs. of—free	2,154
Spirits and wines—dutiable	$2,048
Sugar—dutiable	1,614
Tobacco and mfrs. of—dutiable	1,709
Tobacco and mfrs. of—free	
Tobacco, pipes, pipe mounts, cigar and cigarette cases, etc.—dutiable	182,776
Trunks, pocketbooks, purses, hat boxes, etc.—dutiable	7,006
Umbrellas, parasols, and sunshades, of all kinds and materials—dutiable	$9
Watches—dutiable	395
Wood and mfrs. of:—	
Furniture—dutiable	$22,220
Other wood and mfrs. of—dutiable	3,702
Other wood and mfrs. of—free	
Total wood and mfrs. of—dutiable	$25,922
Total wood and mfrs. of—free	
Wool and mfrs. of:—	
Blankets—dutiable	$1,987
Carpets:	
Carpets, all kinds—dutiable	4,818
Mats and rugs, including hearth sizes, 36 sq. ft. and smaller, wool, N.O.P.—dutiable	5,224
Clothing:—	
Shawls—dutiable	5,573
Other clothing, N.O.P.—dutiable	2,419
Fabrics:—	
Cassimeres, cloths and doeskins—dutiable	85
Other fabrics, N.O.P.—dutiable	11,152
Felt, pressed, of all kinds, not filled or covered by or with any woven fabric—dutiable	50,599
Other wool and mfrs. of—dutiable	764
Other wool and mfrs. of—free	
Total wool and mfrs. of—dutiable	$82,621
Total wool and mfrs. of—free	
All other articles imported—dutiable	$27,211
All other articles imported—free	19,020

RECAPITULATION.

Imports—dutiable	$1,703,382
Imports—free	84,091
Total imports (mdse.)	$1,787,473
Coin and bullion	
Total imports	$1,787,473
Total exports	378,824
Total trade	$2,166,297

BUSY CANADIAN FACTORIES.

Some Canadian Factories Which Are Finding Work To Do.

The ten mills of the Dominion Textile Co., Limited, have resumed full time operations. During the eight months prior to the commencement of the war in Europe the 7,000 employees of this company were working on an average only seventy per cent. of the time.

The operation at full capacity of the ten mills of the Dominion Textile Co., Limited, will mean the placing in circulation annually of upwards of $10,000,000. Most of this large amount of money will be spent in Canada—in wages, in freight and cartage, in coal, oil and other factory supplies and in the many other items that enter into the cost of the finished product.

DEMAND FOR CANADIAN MADE ELECTRIC LAMPS.

When the war broke out the plant of the Canadian Tungsten Lamp Co., Limited, at Hamilton was shut down for the summer. Under ordinary conditions operations would not have been resumed until September 15th. In view of the probability of an increased demand on account of the war the plant was put in operation on August 15th—a month ahead of the usual time. Since operations were recommenced the staff has been employed several nights a week in an effort to keep up with the demand. Although the present output of the plant is seventy-five per cent. greater than under normal conditions it is not sufficient to meet the increased demand.

The plant of the Canadian Sunbeam Co., Limited, in Toronto, was reopened on July 28th after the usual thirty-day summer shut down. This plant has been operated ever since at full capacity, and plans are being made to double last year's output.

FURNACE MANUFACTURERS.

Warden King, Limited, state that their full staff of 2,000 are busy making furnaces, etc., and that none are being laid off.

DOUBLE SHIFTS IN THE MERCURY MILLS.

The Mercury Mills, in common with other Canadian hosiery manufacturers, are being benefited by the shutting off of imports from Germany and Austria into Canada. During the fiscal year ending March 31, 1914, the imports of hosiery from Germany to Canada were valued at upwards of half a million dollars. Austria-Hungary also secured a share of the Canadian hosiery trade. The hosiery manufacturers of Canada have now an opportunity of securing this trade that formerly went to Germany and Austria-Hungary.

JAM FACTORIES WORKING.

The embargo on the exportation of jam from the United Kingdom will increase the demand for Canadian made jams. During the fiscal year ending March 31st, 1914, over $500,000 worth of jams, jellies, and preserves were imported from the United Kingdom into Canada.

Dominion Canners, Limited, is operating its jam factory at Hamilton at maximum capacity, night as well as day shifts being employed. E. D. Smith and Sons, Limited, has increased the staff in its jam factory at Winona, Ont., and will have a record output this season. In the plant of Linders, Limited, at Toronto, for example, where, under ordinary conditions, about forty-five hands are employed, it is expected that night as well as day shifts will be employed for the next six or seven months.

EXPORTS OF AUSTRO-HUNGARIAN PRODUCE FROM AUSTRIA-HUNGARY TO PRINCIPAL EUROPEAN COUNTRIES.

NOTE.—Krone=20.3 Cents.

YEAR ENDED DECEMBER 31st, 1913.

(Compiled Specially for Industrial Canada by the Trade and Commerce Department.)

VALUE OF EXPORTS TO EUROPEAN COUNTRIES.

ARTICLES—SOLD BY AUSTRIA TO	Belgium.	Bulgaria.	France.	Greece.	United Kingdom.	Italy.	Nether-lands.	Roumania.	Russia.	Switzer-land.	Servia.	Turkey
	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.
Colonial produce	.....	756	.....	.....	308	1,260	756	2,975	252	.....	.....	1,657
Spices	368	280,160	1,840	.....	4,968	28,463	736	33,400	38,856	7,360	28,216	39,576
Southern fruits	.....	12,449	10,261	25,679	288	218,019	.....	101,862	821,093	24,320	132,185	46,094
Sugar	1,317	7,657,494	5,861	10,071,235	132,077,422	1,568,073	47	65,629	1,075	23,738,559	675,521	37,849,742
Tobacco	125,337	9,150	1,700,510	.....	123,920	5,800	1,327,066	2,600	1,770	1,188,578	13,515	7,200
Cereals, pulse, flour and products of flour, rice	1,725,832	86,794	1,632,196	1,229,209	5,154,942	6,320,130	2,197,826	384,193	281,793	12,799,439	5,411,312	1,946,244
Vegetables, fruits, plants and parts of plants	1,600,937	562,752	2,443,579	406,602	1,512,421	2,973,087	757,823	2,758,307	4,930,225	3,408,887	2,790,633	1,891,547
Cattle and draught animals	28,788	5,600	274,224	40,400	2,400	7,794,033	.....	3,738,825	675,888	900,306	41,500	5,200
Animals, other	644,834	.....	419,734	.....	207,571	1,139,795	55,360	31,552	95,735	2,097,286	213,075	.....
Animal products	1,716,073	221,552	9,975,622	547,072	3,529,726	4,821,146	2,506,854	3,991,344	4,379,846	11,272,953	3,156,688	257,140
Greases	166,938	199,949	1,066,006	329,270	688,148	6,214,624	699,898	832,066	1,522,177	778,474	339,372	612,778
Oils, fatty	160	9,991	154	1,628	.....	38,438	526	44,602	5,987	3,836	25,861	13,058
Beverages	642,904	118,486	957,915	499,615	639,268	2,433,953	423,144	298,791	1,263,152	6,464,220	1,414,783	1,932,102
Comestibles	109,508	141,431	2,056,176	59,898	276,606	592,537	56,975	366,462	100,001	947,611	215,006	649,531
Wood, coal and turf	708,430	984,342	6,895,733	3,124,102	1,403,495	88,076,156	873,161	25,242,471	21,898,612	11,019,461	3,479,140	495,634
Turners' and carvers' materials	26,572	2,942	135,326	5,548	146,329	156,928	20,341	107,142	230,653	9,789	34,639	3,045
Minerals	84,968	15,096	1,097,701	11,826	2,284,220	2,932,249	167,841	434,492	1,519,125	687,258	45,380	24,313
Medicinal and odoriferous substances	6,800	10,200	129,880	24,624	74,840	134,552	.....	32,935	147,708	35,440	3,440	23,480
Dyeing and tanning materials	34,758	127,803	43,519	20,738	1,188,149	299,522	105,755	163,221	343,229	108,605	253,437	31,875
Gums and resins	10,153	57,160	145,962	75,542	192,389	414,453	4,997	181,122	745,907	79,726	257,955	53,044
Mineral oils, also coal and schist tar	2,015,130	38,575	9,524,592	136,983	1,176,107	1,841,323	633,422	15,674	37,697	5,126,860	286,924	37,226
Cotton, yarn and manufactures of, even mixed with linen, but not, however, with wool or silk	855,422	2,523,494	629,005	2,938,140	4,557,423	4,920,315	7,160,087	14,632,687	2,418,893	3,564,276	4,911,099	22,141,954
Flax, hemp, jute and other vegetable textiles, not specially mentioned; yarns and goods of the same not mixed with cotton, wool or silk	468,652	834,050	469,320	646,395	5,845,538	2,727,501	293,895	4,672,986	512,348	2,072,841	1,078,827	1,348,810
Wool, woollen yarn and woollen goods, even mixed with other textile materials, silk excepted	2,339,155	2,231,666	3,046,595	1,928,755	4,392,715	6,265,902	2,226,590	10 771,099	9,492,619	2,310,880	4,266,414	4,195,290
Silk and silk goods, even mixed with other textile materials	732,040	281,830	2,520,255	98,730	8,989,510	16 205,814	254,020	1,349,440	443,610	3,639,120	194,010	428,270
Clothing, linen and articles of attire, with the exception of such articles made of paper, leather, caoutchouc or oilcloth	2,157,734	1,330,595	3,019,566	799,579	14,273,905	3,431,099	1,971,317	4,189,416	2,833,553	2,815,515	2,454,415	6,403,972
Brush and sieve makers' wares	4,890	40,925	37,875	50,190	1,123,125	28,700	3,100	9,975	80,045	53,145	30,865	205,460
Straw and bast wares, also goods of rushes, cocoanut fibres, grass, reeds, shavings, cane, roots, etc.	44,210	12,800	79,250	28,090	496,400	40,350	29,720	26,140	43,400	43,390	32,904	32,788
Paper and its manufactures	765,406	954,220	3,922,068	1,318,777	2,965,251	11,224,190	595,572	1,125,996	1,133,152	3,831,369	936,335	3,448,509
India rubber, gutta percha, and their manufactures	365,130	192,990	699,485	155,000	3,012,360	1,546,645	287,780	1,053,910	824,645	473,200	244,170	317,940
Oil cloth and oiled silk	83,490	85,580	22,655	21,095	178,900	54,950	79,120	792,960	10,510	73,005	116,535	402,415
Leather and its manufactures	910,375	2,424,130	2,104,725	449,350	29,046,610	4,200,730	1,231,610	4,597,865	2,464,535	2,163,945	5,493,260	1,097,440
Furriers' wares	204,800	32,770	850,700	5,740	515,560	130,300	120,730	146,570	51,940	357,260	13,680	15,880
Wood and bone manufactures	2,424,957	441,521	4,585,014	814,585	13,999,152	6,313,538	2,101,687	3,046,094	3,145,713	1,686,602	871,842	1,201,436
Glass and glassware	1,027,663	571,434	5,548,238	525,437	8,885,041	3,344,181	1,820,889	2,200,981	1,429,012	792,015	610,116	1,464,074
Manufactures of stone, unburnt clay, cements and stone compositions	12,129	438,448	77,608	23,201	86,369	270,913	20,822	549,776	1,084,560	27,662	138,686	58,162
Earthenware	543,069	173,222	1,085,985	96,877	3,977,823	1,426,704	411,475	1,007,362	1,445,396	526,136	312,463	294,374
Iron, steel, and their manufactures	214,344	1,493,623	753,526	753,510	278,376	5,886,704	631,914	7,471,483	6,250,288	927,229	2,337,895	1,067,269
Common metals and manufactures thereof	1,296,401	450,825	5,778,583	974,839	7,977,209	7,416,249	1,600,804	3,564,147	5,517,245	1,862,712	1,106,646	1,228,978
Machines, apparatus and parts thereof, of wood iron or common metals	387,086	1,473,486	924,074	155,278	266,909	1,884,395	403,191	4,777,234	10,593,699	451,867	1,456,039	230,701
Machinery, electrical, and apparatus and electro-technical necessities	284,813	495,557	225,766	226,374	794,623	2,197,832	32,977	723,596	1,633,309	97,208	215,875	613,697
Vehicles and vessels	37,130	545,320	277,275	6,910	166-960	786,785	74,190	2,210,829	3,735,057	151,425	4,790,173	41,814
Precious metals and stones	1,987,282	7,786,300	2,858,792	8,080,504	3,744,742	979,773	438,506	3,341,951	757,543	2,761,183	16,356,372	8,110,064
Instruments, watches and smallwares	117,260	121,089	255,234	68,618	738,920	802,630	155,126	929,278	2,279,185	489,712	257,649	52,722
Kitchen salt	.....	157,683	2,545	50	580	1,266	.....	.....	20,881	.....	413,635	3,256
Chemical auxiliary substances	1,541,684	626,144	700,627	309,730	2,270,022	2,832,566	996,038	2,244,652	1,263,659	1,112,094	733,080	583,595
Candles and soap	2,244	93,280	6,530	31,027	35,319	90,930	3,846	43,346	74,018	21,420	312,625	291,446
Chemical products, colors, pharmaceutical products and perfumery	65,096	352,433	276,715	290,353	1,202,860	649,600	93,113	930,966	1,151,581	230,899	420-573	337,551
Explosives	3,268	716,258	625,576	409,640	680,444	1,172,775	1,367,290	1,782,320	36,440	7,039	149,356	897,424
Literary and artistic articles	270,610	106,110	1,180,760	34,890	1,233,520	728,430	260,740	573,570	2,816,830	634,560	293,790	86,700
Refuse	.....	6,984	24,326	4,776	213,622	1,229,221	6,064	87,414	238,842	139,485	2,390	6,191
Total Exports, 1913	28,796,047	37,537,249	81,104,964	37,856,302	272,633,305	215,795,529	34,504,741	117,683,708	102,823,288	114,020,462	69,370,300	102,528,668
Total Exports, 1912	26,237,921	54,032,490	85,315,636	23,997,610	278,654,720	239,592,999	29,795,121	136,478,179	91,002,063	125,661,844	47,554,930	117,875,791
Total Exports, 1911	22,177,345	36,169,913	95,838,391	17,440,546	222,127,638	222,349,765	24,171,009	126,519,987	95,893,550	112,811,446	41,874,009	98,532,663
Total Exports, 1910	24,242,547	34,848,914	77,684,065	21,128,298	225,782,475	228,486,035	26,125,468	104,460,323	90,796,774	106,599,239	20,208,373	103,239,427
Total Exports, 1909	22,464,057	31,373,198	71,746,250	16,996,360	245,501,603	233,458,199	26,001,716	93,603,215	76,926,570	96,910,244	21,226,478	70,521,526

AUSTRIA HAS GOOD TRADE WITH AMERICA—SHE SELLS CONSIDERABLE GOODS TO MOST COUNTRIES.

EXPORTS OF AUSTRO-HUNGARIAN PRODUCE FROM AUSTRIA-HUNGARY TO AMERICAN COUNTRIES, YEAR ENDED DECEMBER 31st, 1913.

NOTE.—Krone=20.3 Cents.

(Compiled Specially for Industrial Canada by the Trade and Commerce Department.)

ARTICLES—SOLD BY AUSTRIA TO	Total Value of the Exports.	VALUE OF EXPORTS TO AMERICAN COUNTRIES.										
		Argentine Republic.	Brazil.	British West Indies.	Canada.	Central American States.	Chili.	Colombia.	Cuba.	Mexico.	Peru.	United States.	Other American Countries
	Kronen.	Kronen.	Kronen.	Kronen	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.	Kronen.
Colonial produce	21,249	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spices	864,551	2.576	568	.....	1,840	.....	.....	.....	.....	.....	.....	88,704	.....
Southern fruits	4.341.298	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	108.774	.....
Sugar	297,337.575	1,807,302	.....	.....	14,932	.....	.....	.....	715	.....	.....	1,194.865	148
Tobaeeo	13.830,791	32,830	10.150	.....	.....	.....	16.560	.....	.....	.....	.....	88,290	.....
Cereals and pulse; flour and produets of flour, riee	115,172,643	7.195.968	4,281.178	27,234	154.388	14.749	.....	.....	931,589	13.495	175.185	1,566.041	466,956
Vegetables, fruits, plants and parts of plants	128.672.006	172.065	935,028	.....	44.072	.....	20.730	2,500	.....	3.360	.....	9,784.057	23.572
Cattle and draught animals	63,389,224	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.600	.....
Animals, other	23.645,005	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.804	.....
Animal produets	274.642,568	166,564	2,720	.....	500	.....	3,600	.....	.....	.....	.....	2.284.640	310,060
Greases	30,160,954	54.146	44.462	.....	496	.....	156.829	.....	.....	7,191	10.716	370.001	33,804
Oils, fatty	251.749	.....	330	.....	696	.....	.....	.....	.....	.....	.....	19,668	.....
Beverages	41.767-870	542.132	57,455	.....	33.330	.....	74.929	966	1,431	5.261	7,695	4.158.310	198,519
Comestibles	9,877,762	63,544	4,902	.....	2.376	133	4,956	720	.....	2.400	1,060	122,090	13.862
Wood, eoal and turf	375,886.855	1.042.356	4,937	.....	.....	.....	.....	.....	.....	.....	.....	22,627	.....
Turners' and earvers' materials	3.762,053	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	225,084	.....
Minerals	46,961.804	29,198	14,155	.....	751	.....	.....	.....	.....	.....	.....	7.375,487	.....
Medieinal and odoriferous substanees	1,939.620	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.000	.....
Dyeing and tanning materials	7.512,495	.....	.....	.....	3.500	.....	102	.....	.....	.....	.....	29.029	.....
Gums and resins	8,521,010	2,110	1.300	.....	.....	.....	.....	.....	.....	.....	310	536,534	15,965
Mineral oils, also coal and sehist tar	65,344.006	9.994	116,320	.....	763	.....	.....	.....	.....	.....	.....	20.117	.....
Cotton yarn and manufaetures of, even mixed with linen, but not, however, with wool or silk	151,690,939	1.474.131	922.448	5.410	56.115	26.758	356.082	92.378	38,345	227,232	89.475	1,839,563	276.235
Flax, hemp, jute and other vegetable textiles not speeially mentioned; yarns and goods of the same not mixed with eotton, wool or silk	81,682.586	842,661	248,663	750	254,790	6.110	148,570	9.200	26,250	14,360	3,510	6,447.570	328,180
Wool, woollen yarn and woollen goods, even mixed with other textile materials, silk exeepted	111,485,532	961,220	379.915	.....	539,600	36,410	202,800	12,000	96,000	29.240	33.315	2,185.585	400,040
Silk and silk goods, even mixed with other textile materials	51,528,399	262,000	135,100	.....	443.800	2,520	37,320	14,360	5.200	58.520	.....	1.101.440	70.240
Clothing, linen and artieles of attire, with the exeeption of sueh artieles made of paper, leather, caoutehoue or oil eloth	100,892.502	615,308	1.384.152	23,836	365,053	149.209	174.035	154, 790	272.292	247.320	150,219	4.767,893	708,007
Brush and sieve makers' wares	2,688.915	5.250	5.655	.....	.....	435	420	.....	.....	.....	.....	11,865	.....
Straw and bast wares, also goods of rushes, eoeoanut fibres, grass, reeds, shavings, eane, roots, ete.	3,110.000	8.220	2,000	.....	23,440	.....	420	.....	2.600	.....	.....	774.490	400
Paper and its manufaetures	63.512,293	635.741	797,381	2.805	47,506	41.903	68.062	19,658	14,925	37.178	16.285	2,103.519	62,010
India rubber, gutta percha and their manufaetures	16.938,180	370,330	181,330	1.620	4.800	3,330	46.740	10,980	4,140	20.360	1,080	211,600	36.380
Oil eloth and oiled silk	3,445,965	188.105	67,120	.....	5.555	4.650	8,320	.....	.....	9,920	10.230	4.135	3,100
Leather and its manufaetures	90.036.925	169,80	233,680	.....	349.980	35,010	72,830	50.790	1,100	11,010	10.980	2,692,625	61.805
Furriers' wares	9,421.510	14,640	2.870	.....	17.220	.....	6,600	.....	.....	.....	.....	9,470	.....
Wood and bone manufaetures	87.377,277	3.293,443	876.995	8.241	322,055	27,133	202.890	21,880	85.019	204,750	38,465	4,456.123	249,721
Glass and glassware	86,726.680	239,192	53,570	.....	102,119	1.395	9.781	2,700	111,399	62,280	6.331	5,938.398	60,433
Manufaetures of stone, unburnt clay, cement and stone compositions	8,604,999	459.979	309.871	.....	.....	.....	.....	.....	.....	102	.....	173,553	138,890
Earthenware	28.240.505	148,917	86,697	1.936	920,443	73.824	27,357	62,312	17,766	69,747	3.796	2,328.088	86,987
Iron, steel and their manufactures	43,446.063	462.363	176,972	.....	12,060	4.912	69,030	139,664	600	138,978	39.591	254,797	13,190
Common metals and manufaetures thereof	87,049,689	705.930	267,142	.....	105,610	18,259	149,803	30,915	128,970	179,326	57,814	1,869,820	236.557
Maehines, apparatus and parts thereof, of wood, iron or common metals	31,045.601	242.784	91,626	.....	10,450	.....	4,040	.....	.....	25.896	4.950	38,304	8.998
Maehinery, eleetrieal, and apparatus and eleetro-technieal necessities	12,200,590	144,787	10,240	.....	23.430	.....	6,755	.....	.....	8,000	.....	157,004	1,440
Vehieles and vessels	17.726,713	39.295	103.330	.....	.....	.....	.....	.....	.....	.....	.....	153,190	.....
Preeious metals and stones	118.085.724	11,400	.....	.....	3,800	2,030	11,100	.....	.....	.....	.....	64,904	14,080
Instruments, watehes and smallwares	13.197.621	126.696	45,502	.....	104.985	1,000	20.222	2.487	2.320	42,500	.....	1.176.564	14.671
Kitehen salt	627.795	13.500	1,248	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.250
Chemieal auxiliary substanees	55.479.112	184.555	63.302	.....	50.293	585	65.520	6.565	8,580	293.855	6,905	1,939.452	22,620
Chemieal produets, colors, pharmaeeutieal products and perfumery	12.303.489	75,080	36,780	.....	9.200	7,442	6.257	18.050	.....	26.990	480	375,359	13,700
Candles and soap	3.063.396	20.232	12.044	.....	7.246	360	2.520	720	360	180	2.260	83,828	13,000
Explosives	15.018,417	6.750	2,880	33.956	.....	240	240	19,260	4.374	2,160	.....	363,838	240
Literary and artistic articles	29,037,150	24,260	38.910	.....	67.020	19,160	10.620	2.700	24,720	8.100	.....	571,740	9,750
Refuse	27.398,958	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122,423	.....
Total Exports, 1913	2.876.966,663	22.667,349	12,009,728	105.796	4,101,211	477,557	1,955,870	675.575	1,778,695	1,749,711	660.612	70.235,862	3,895,613
Total Exports, 1912	2,912,275,235	21,974,025	13,812,043	55.746	2,813.943	354.134	2,328,041	390.913	1,623,931	2.459,046	743.016	63,886,677	4,188,248
Total Exports, 1911	2,537,218.753	17,776,990	14,692.548	209,013	2,827.878	714.877	3,279.613	307,734	911,752	1.674,460	562,180	58,451,966	3.107.141
Total Exports, 1910	2,499,536,131	14,208,944	10.761,580	90,744	3.003.455	185,774	2.472.304	343.620	601,998	1,952,859	340,252	81,352,237	2,916,056
Total Exports, 1909	2.417,199,695	10,662.137	7,008.444	152.958	2,592,175	267,297	1.109.661	160,660	597,586	1.619,425	303,576	81.236,168	3.159.159

Exports of Austro-Hungarian Produce from Austria-Hungary to Australasia and Asiatic Countries.

PICK OUT THE ITEMS YOU CAN SUBSTITUTE FOR AUSTRIAN GOODS.

NOTE:—Krone = 20.3 Cents.

Year Ended December 31st, 1913

Compiled Specially for Industrial Canada by the Trade and Commerce Department.

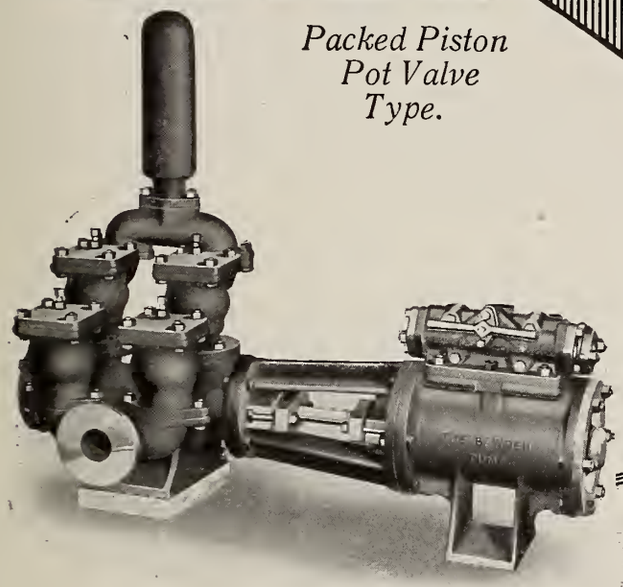
ARTICLES—EXPORTED BY AUSTRIA TO	VALUE OF EXPORTS TO AUSTRALASIA			VALUE OF EXPORTS TO ASIATIC COUNTRIES								
	British Australia	New Zealand	Other Australasia	British India	China	French Indo-China	Japan	Netherlands India	Persia	Russia	Turkey	Other Asiatic Countries
	Kronen	Kronen	Kronen	Kronen	Kronen	Kronen	Kronen	Kronen	Kronen	Kronen	Kronen	Kronen
Colonial produce	....	....	....	....	....	....	....	....	....	....	....	....
Spices	....	....	....	15,064	....	....	....	....	....	....	12,648	....
Southern fruits	....	....	....	....	....	....	....	....	....	....	804	....
Sugar	....	....	....	43,972,170	....	....	3,960	....	1,625,485	....	13,977,959	55,056
Tobacco	120	....	....	....	....	....	....	....	....	....	....	4,560
Cereals and pulse; flour and products of flour, rice	3,060	....	....	49,630	124,950	....	710,899	8,855	....	122,461	195,287	111,996
Vegetable, fruits, plants and parts of plants	22,477	2,160	....	10,149	....	....	....	....	....	1,470	261,050	....
Cattle and draught animals	....	....	....	....	....	....	....	....	....	....	....	....
Animals, other	....	....	....	....	....	....	....	....	....	....	....	....
Animal products	....	....	....	65,136	....	....	35,802	2,080	1,500	....	101,248	....
Greases	37,600	....	....	53,812	17,799	....	393,631	41,361	....	5,358	274,627	....
Oils, fatty	....	....	....	4,654	....	....	....	....	....	....	955	....
Beverages	40,573	....	2,070	60,961	9,586	....	11,597	14,112	720	1,163	248,074	814
Comestibles	540	180	900	17,796	....	....	....	1,050	....	288	164,418	510
Wood, coal, and turf	....	....	....	385,968	....	....	385	....	....	....	434,040	1,523
Turners' and carvers' materials	3,900	....	....	22,046	....	....	....	660	....	....	61,128	....
Minerals	534	....	345	61,229	52,023	....	11,622	....	....	....	7,668	172
Medicinal and odoriferous substances	....	....	....	....	....	....	....	....	....	....	14,320	....
Dyeing and tanning materials	55,475	....	....	5,675	....	....	....	....	....	....	58,984	....
Gums and resins	....	....	....	71,634	....	....	....	620	7,905	....	11,840	....
Mineral oils, also coal and schist tar	150	....	....	....	1,944	....	....	....	....	....	18,146	....
Cotton, yarn, and manufactures of, even mixed with linen, but not, however, with wool or silk	63,760	2,000	5,875	7,601,247	610,195	7,135	119,502	39,379	351,356	55,730	14,968,600	122,970
Flax, hemp, jute and other vegetable textiles, not especially mentioned; yarns and goods of the same not mixed with cotton, wool or silk	99,074	3,810	23,940	244,335	5,205	....	....	....	9,750	....	1,695,795	....
Wool, woollen yarn and woollen goods, even mixed with other textile materials, silk excepted	127,200	....	6,000	3,634,405	127,090	....	7,745,470	59,340	601,650	3,900	5,923,476	41,100
Silk and silk goods, even mixed with other textile materials	18,480	....	5,200	342,370	26,780	....	21,000	17,000	459,070	....	213,010	5,960
Clothing, linen and articles of attre, with the exception of such articles made of paper, leather, caoutchouc or oil-cloth	62,759	1,125	21,197	1,288,740	266,519	700	4,546	191,861	92,235	64,382	3,786,455	30,400
Brush and sieve makers' wares	48,025	....	945	47,465	....	....	....	3,045	....	....	180,405	....
Straw and bast wares, also goods of rushes, cocoanut fibres, grass, reeds, shavings, cane, roots, etc.	2,400	400	....	40,060	1,680	....	1,540	....	700	....	45,260	....
Paper and its manufactures	173,327	1,605	9,673	4,480,736	1,070,520	....	1,031,570	280,357	48,408	650	2,131,627	63,991
India rubber, gutta percha, and their manufactures	3,360	....	....	801,105	28,350	....	19,870	10,790	44,820	900	184,890	6,620
Oil-cloth and oiled silk	180	1,620	....	52,430	360	....	....	1,440	....	....	99,725	1,075
Leather and its manufactures	91,665	2,590	17,340	601,960	162,515	645	41,760	37,820	106,340	230,190	1,196,690	22,400
Furriers' wares	....	....	....	....	....	....	....	....	....	....	....	....
Wood and bone manufactures	251,259	40,509	100,909	2,066,143	133,820	49,442	135,535	175,096	150,692	17,324	1,006,929	49,747
Glass and glassware	30,315	2,599	4,970	20,293,811	393,391	625	333,984	8,585	11,159	40,833	1,860,730	22,567
Manufactures of stone, unburnt clay, cements and stone compositions	44,738	....	....	59 496	162	....	90,280	1,377	....	170,042	304,232	2,463
Earthenware	637,128	80,392	18,361	219,881	42,943	....	55,561	848,087	2,448	1,768	382,099	8,216
Iron, steel and their manufactures	51,935	....	940	1,691,947	1,943,106	3,780	261,017	131,766	30,279	15,261	1,081,708	13,560
Common metals and manufactures thereof	29,790	1,664	69,244	2,333,086	515,124	2,600	177,599	773,600	116,625	44,530	948,353	26,010
Machines, apparatus and parts thereof, of wood, iron or common metals	9,150	....	18,360	56,450	5,800	....	15,780	244,310	198	6,412	36,560	....
Machinery, electrical, and apparatus and electro-technical necessities	81,820	....	2,845	145,079	1,725	....	13,225	4,830	....	11,885	293,105	....
Vehicles and vessels	1,950	....	33,920	48,460	1,950	....	30,280	....	....	....	1,870	....
Precious metals and stones	....	....	....	5,418,852	7,600	....	....	3,800	4,060	258,590	1,276,414	27,220
Instruments, watches and smallwares	19,539	3,240	7,800	68,035	4,800	317	6,750	14,239	....	18,500	33,561	3,380
Kitchen salt	....	....	....	....	....	....	....	....	....	....	200	....
Chemical auxiliary substances	10,790	3,431	975	1,190,808	126,683	....	350,988	81,778	3,150	374	716,034	....
Chemical products, colors, pharmaceutical products and perfumery	....	....	....	339,295	35,000	5,400	14,600	7,260	6,400	8,850	229,230	....
Candles and soap	2,160	....	....	567,014	437,154	....	63,180	1,200	540	....	110,136	1,260
Explosives	32,778	....	....	1,327,006	1,200	....	90,000	24,312	18,252	....	1,510,691	....
Literary and artistic articles	1,080	....	1,080	18,900	7,560	....	21,660	2,160	540	540	56,400	540
Refuse	....	....	....	3,929	....	....	....	....	....	....	1,511	....
Total Exports, 1913	2,059,080	147,325	352,899	99,779,545	6,163,534	70,644	11,793,583	3,032,170	3,694,282	822,811	56,118,892	624,110
Total Exports, 1912	1,892,400	69,808	441,323	70,633,649	3,488,851	23,475	11,542,734	3,432,892	2,691,946	712,001	34,183,148	429,701
Total Exports, 1911	1,897,129	52,791	641,601	60,370,279	3,434,581	62,294	5,206,657	2,115,725	3,089,043	680,763	34,488,427	435,303
Total Exports, 1910	1,413,801	52,075	407,958	75,415,784	2,828,721	42,644	5,004,117	1,639,752	2,759,229	608,977	32,611,380	314,908
Total Exports, 1909	964,054	47,307	254,384	60,917,923	2,893,151	91,687	4,975,015	902,951	1,932,842	286,656	25,104,009	335,816

BAWDEN PUMPS

CANADIAN MADE

BAWDEN NEVER SHORT STROKE PUMPS

Packed Piston Pot Valve Type.



No Tappets, No External Valve Gear Levers or Springs, No Internal Tubes or Stuffing Glands.

THE STEAM CYLINDERS

The **"Bawden"** is governed by balanced piston valves which are controlled by the action of live steam only. All tappets, levers, springs, rocker shafts, tubes or other outside gear which require lubrication and attention are dispensed with.

A special feature of the **"Bawden"** piston valves is the arrangement for catching leakage due to wear and tear, for preventing them from getting into equilibrium at their driving ends. This important feature forms part of the patent claim and results in placing the **"Bawden"** pump ahead of all others in consequence of the much longer time it will work without repairs.

The steam piston is automatically cushioned at each end of the cylinder by a special design of the two main steam ports, therefore dispensing with all adjusting mechanism to compensate variations of speed, etc., and together with the allocation of the drain cocks make the cushion effective under any emergency.

This pump has no dead centres; does not hang up and cannot be held up. It makes a full length stroke at any piston speed and on any duty.

Our Guarantee

A. 25% saving in steam consumption over all standard duplex pumps.

B. To make a full stroke of the piston under all conditions.

C. Has no dead centres.

D. Run at any working speed without adjustment of any kind.

E. Not to knock or bang.

F. Pumps to be all we guarantee, or returned at our expense.

THE WATER ENDS

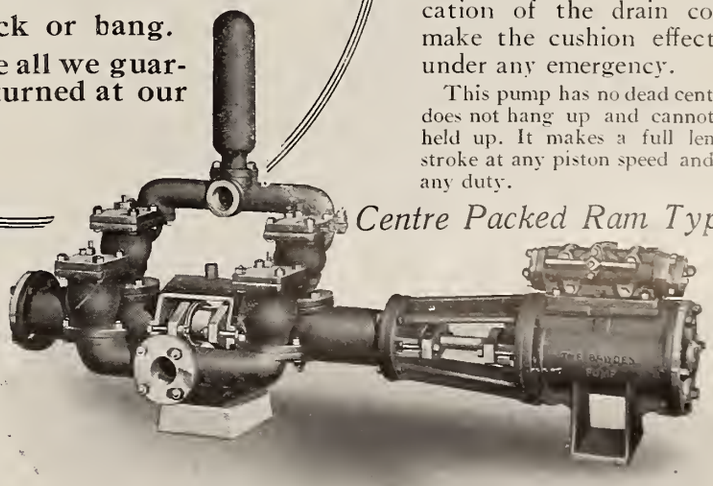
The water ends are built on entirely new and improved designs and offer the greatest facilities for inspection and repair.

The valve seats are driven in on special taper, and held solid with brass stoppers through the top covers ; this is much bettter and a more simple method than using the screwed seats, which in practice are found to rust and shake loose.

The **"Bawden"** pumps are heavily constructed and have an increased number of bolts to meet modern steam pressures. "T" head and through bolts are used instead of studs, all face joints are machined and every part is manufactured strictly to gauge and therefore interchangeable.

Every pump undergoes a rigid test before leaving our factory, and carries our guarantee to be all that we claim in every way.

Centre Packed Ram Type.



The Bawden Machine Co., Ltd., 125-137 Sterling Road TORONTO, CANADA

BRASS FOUNDERS.

The James Morrison Brass Mfg. Co. report that their factory is working full time.

SCIENCE AND INDUSTRY.

The Royal Canadian Institute has just issued a pamphlet, entitled "Co-operation between Science and Industry," dealing with the necessity for the establishment of a Bureau of Scientific and Industrial Research. The pamphlet is written by Mr. Frank Arnoldi, K.C., President of the Society, and deals in a most comprehensive manner with the problem of applying the discoveries of scientific men to industrial processes. The Institute, after prosecuting its work during the past sixty-five years, believes that its object can be best attained by the organization within the Institute of a Bureau of Scientific and Industrial Research for the use and advantage of the industries of Canada.

The pamphlet refers to the excellent work which has been done in the United States by the Johns Hopkins University, the Carnegie Institution and the Mellon Institute of Pittsburg. In the last named institution students are given fellowships which afford them the financial means of prosecuting their researches for scientific processes which will be of industrial value.

The Royal Canadian Institute believes that co-operation between our universities and manufacturers will set at work a body of highly trained men who will find means to improve the various industrial processes of Canada.

The attention of manufacturers is directed to this pamphlet by INDUSTRIAL CANADA with the assurance that their interest and co-operation will be well recompensed.

All communications should be addressed to the Secretary, Royal Canadian Institute, 198 College Street, Toronto.

CALENDARS.

We have received from the John Bertram & Sons Co., Limited, and Pratt & Whitney Co. of Canada, Limited, Dundas, Ontario, two handsome calendars for the year 1914-15.

HAVE YOU PIT PROPS TO SELL?

Pit Props are urgently needed in Great Britain for use in the mines. The supply from the Baltic has been cut off through the war, and prices have risen fifty per cent. The props needed are: Fir from 4 feet to 6 feet long, 5 inches to 6 inches diameter tops, also straight fir poles, spruce or larch, 20 feet to 30 feet long, 5 inches to 9 inches.

For further particulars apply to the Trade and Commerce Department, Ottawa.

SASKATOON, SASK.

Work on the big interior elevator for the Dominion Government is being pushed forward rapidly. It is expected that this will be ready in time to handle the forthcoming crops.

WEYBURN, SASK.

Keely Bros., of Omaha, Neb., have established a temporary plant for making boilers and will later build a modern shop.

TRADE OPENINGS IN IRON INDUSTRY.

Sir George Foster has issued another warning to Canadian merchants against the attempt of German agents in the United States to circumvent the imperial order prohibiting trade with the enemy and once more calling attention to the fact that the placing of orders for German or Austrian goods through these agents is both unpatriotic and contrary to law.

It is pointed out in a fourth bulletin dealing with opportunities to capture German trade that textile goods have been largely exported by Germany to Australia, New Zealand, South Africa, the West Indies, India and the Orient. Other opportunities are open in iron and its allied industries, machinery, musical instruments, earthenware, pulp and paper, leather goods, explosives, wines, spirits, etc. There is an opportunity in Japan also for pulp and paper. By the shutting off of the main supply from Germany the price has risen considerably in Japan.

INCREASED DEMAND IN CANADIAN GOODS.

The Canadian trade commissioners in England report increased demands for Canadian natural and manufactured products, as a result of the stoppage of trade with Germany and Austria. Enamelware, brushes, brooms, tool handles, nails, wire fencing, pails, small tools, hardware sundries, boots and shoes, leather and leather manufactures are wanted.

CANADA FIRST.

"Canada First should be our slogan. We should not allow ourselves to be persuaded to accept a foreign substitute for any Canadian-made product."—H. Mueller Mfg. Co., Ltd., Sarnia, to its purchasing department.

The output of the Co-operative Creameries in Saskatchewan is increasing at a very rapid rate, as is shown by the Government report, recently issued. In the six winter months of 1912-13 the output was 112,732 pounds of butter, whereas during the same period of 1913-14 it was 235,349. The total increase was 122,617 pounds of butter, or 109 per cent. This goes to show that the co-operative movement in Saskatchewan is having a very good effect.

The only manufacturing industry now working full time in Germany is the Establishment for the Manufacture of Widows and Orphans of which the German Kaiser is the President and Managing Director. Let us be awake to our opportunities and obtain our share of the prosperity that is bound to come to Canada, once this German Made, Cold Blooded, Diabolical Plot Against Humanity and Civilization has received its quietus at the hands of the Allies. The soil fertilized by British blood spilled on the fields of battle produces the greatest crop of liberty and justice known to man.—From the address of Mr. R. C. Wilkins, President of Eastern Townships Association Boards of Trade.

BRITISH TRADE IN CANADA

Trade Commissioner Publishes a Report Showing How Great Britain Can Secure a Larger Share of Canada's Import Trade

THE report of Mr. C. Hamilton Wickes, British Trade Commissioner for Canada and Newfoundland, has just been published. It contains a detailed analysis of Canada's import trade and is intended to show British manufacturers how they can sell goods in Canada.

Mr. Wickes' Report in Part.

There are not many British firms of whose manufactures the Canadian market takes sufficient volume at the present time to support an office and staff of their own.

Many difficulties to direct marketing present themselves in the Dominion without the intervention of a representative or agent; of course, there are Canadian firms who visit England to make purchases, but there are few who have offices of their own in the United Kingdom.

In order to develop business an agent in some form or other is, in practice, necessary. While there are British manufacturers operating on this market through their own office, and others through agents who are unexcelled in the thoroughness of their marketing arrangements, the greater number are less fortunately situated. It will be understood that in the ordinary course of the duties attaching to this office a very large number of merchants, importers and agents engaged in handling a variety of classes of merchandise have been seen and interviewed in connection with the enquiries received from the United Kingdom, as well as other firms who have sought our services in order to be put into touch with British firms and sources of supply. In this way a great deal of experience has been gained of the views that these firms have formed relative to British methods which, in their opinion, hamper or hinder the position of British trade with the Dominion.

In many instances the British manufacturer is criticized for failing to appreciate that conditions here may vary from those met with by him in other countries with which he has been accustomed for many years to conduct business. Particularly is this the case where importers of British goods here refer to the necessity for a closer study and a more accurate knowledge of the tariff and the customs law and regulations as modified by orders in council and memoranda issued by the customs department. Our informants state that a cursory knowledge of these appears to satisfy British firms trading with Canada, while, in their opinion, they are matters which it would pay him well to study. In this I am inclined to agree; my experience gained from interviews with British firms at home is that they are inclined to look upon tariffs as an unmitigated nuisance, instead of studying the provisions with a view to trying to make use of them in efforts to displace competitive goods coming from foreign countries whose traders are compelled to meet a heavier impost.

Some of His Conclusions.

I will now proceed to set out some of the more important points which have been brought to my notice:—

(1) The necessity for a closer study of the technicalities of the export trade—e.g., freights, insurance, exchange, packing and casing of goods.

(2) The requirements necessary to obtain the advantages of the preferential section of the tariff. Knowledge of the leading features of the intermediate tariff in favor of France, Belgium, Italy and the Netherlands. Intimate acquaintance with the customs laws and regulations as compiled from the Customs Act, orders in council and memoranda issued by the customs department.

(3) A better knowledge of the terms and credits customarily given on this market to Canadian buyers.

(4) The importance of fixing such a "selling cost price," whether "ex warehouse," or "f.o.b.. U.K. port," as will adequately cover the agent's commission and other incidental expenses. In many instances also more attention should be paid to the price at which the articles are retailed.

(5) The necessity for the selection of suitable agents or representatives. In particular, the terms on which they ought to be employed, taking into consideration the prevailing custom.

(6) The preparation of catalogues in Canadian currency, and fixing one ruling rate of discount in place of many varying rates.

(7) The adequate supply of samples, with due care that such samples are suitable for the Canadian market, and that the samples asked for by the agent are forwarded.

(8) Better knowledge of the geographical features of the Dominion, the distance between the various towns, and the time occupied and the expense incurred by the agent travelling between the different distributing centres.

(9) The necessity for the British principal to read the letters of his agent carefully, answering the questions addressed to him, and paying greater attention to the advice tendered. When this is in the nature of criticism, to try and remove the cause, rather than to assume that the agent is at fault and impertinent in making complaints. British principals are blamed for omitting to reply to criticisms, as well as to enquiries made for information about their goods.



"WATCH YOUR STEP!"

FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of September, 1914.

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

C.R.C.	R.R. No.	Effective.	Description.
Pennsylvania Railroad.			
Sup. 9 G.O. 299	———	Sept. 15-14	Class rates P.R.R. stations to points on C.P. Railway.
Canadian Pacific Railway.			
W 1973 cancels W 1879 1715 1428 739	W 3240 cancels W 3026 2640 2141 1156	Sept. 1-14	Classes and commodities Vancouver, Westminster and Victoria to stations east to Port Arthur.
W 1977	W 3245	Sept. 1-14	Cattle, sheep and hogs stations in Alberta, Saskatchewan, Manitoba, and New Ontario to Port Arthur, Winnipeg, Calgary, Edmonton, etc.
Sup. 35 W 1915	Sup. 35 W 3101	Various dates	Commodities between C.P. Western line stations.
Sup. 4 W 1896	Sup. 4 W 3065	Sept. 1-14	Rules and regulations at C.P. and E. & N. stations.
Sup. 30 W 1615	Sup. 30 W 2443	Sept. 4-14	Lumber and shingles, C.L., coast and interior mills to points in Eastern Canada.
Sup. 2 W 1953	Sup. 2 W 3215	Oct. 1-14	Class and commodity rates between Port Arthur and stations west.
Sup. 5 W 1885	Sup. 5 W 3045	Various dates	Commodities stations on C.P. C.N., and E. & N. stations to Atlantic seaboard for export.
Sup. 15 W 1789	Sup. 15 W 2828	Various dates	Class and commodity rates between Vancouver, etc., and E. & N. stations.
W 1961 cancels W 1691	W 3218 cancels W 2597	Sept. 1-14	Lime, cement, plaster, C.L., between Western line stations. Reduction. New rates.
W 1960 cancels W 1478 1636 1684 1860 1681 1865	W 3222 cancels W 2226 2319 2585 2587 2981 2990	Sept. 1-14	Coal and coke stations in B.C. and Alberta to points C.P., C.N., and G.T.P.
W 1962 cancels W 1769	W 3221 cancels W 2772	Sept. 1-14	Grain flax seed and products, stations in Manitoba, Saskatchewan, and Alberta, to Westfort, Fort William and Port Arthur.
W 1968 cancels W 1878	W 3228 cancels W 3025	Oct. 1-14	Grain, flax seed and products, stations in Manitoba, Saskatchewan, and Alberta, to Duluth, St. Paul, etc.
W 1969 cancels W 1552 1915 1920	W 3235 cancels W 2337 3101 3147	Sept. 1-14	Commodities between C.P. Western Line stations, also to and from E. & N. and K.V. stations.
W 1971 cancels E 1790	W 3236 cancels E 1380	Sept. 1-14	Live stock, C.L., stations on C.P., C.N., and G.T.P. to points in Eastern Canada and Atlantic seaboard for export.
Sup. 13 W 1856	Sup. 13 W 2972	Various dates	Through import tariff Oriental ports of call to points in Eastern Canada.
Sup. 12 W 1789	Sup. 12 W 2828	Various dates	Class and commodity tariff betwen Vancouver, Westminster and stations on E. & N. Ry.
Sup. 16 W 1739	Sup. 16 W 2697	Aug. 18-14	Lumber, shingles, etc., between B.C. coast points and stations in B.C.
Sup. 3 W 1896	Sup. 3 W 3065	Aug. 20-14	Rules and regulations applicable at C.P. and E. & N. stations.
Sup. 33 W 1915	Sup. 33 W 3101	Various dates	Commodities between stations on C.P. Western lines.
Sup. 13 W 1789	Sup. 13 W 1789	Various dates	Class and commodity rates between Vancouver, Westminster and E. & N. stations.
W 1967 cancels 1938	W 3227 cancels W 3174	Sept. 22-14	Commodities between San Francisco, San Pedro, etc., and stations in Canada.
Sup. 16 W 1919	Sup. 16 W 3111	Sept. 21-14	Switching and interswitching at C.P. and E. & N. stations.
Sup. 6 W 1840	Sup. 6 W 3004	Sept. 21-14	Grain and grain products from stations in B.C. to C.P. points.
W 1970 cancels W 1881	W 3229 cancels W 3030	Aug. 26-14	Commodities C.P. Western line stations to China, Japan, etc.
Sup. 11 W 1842	Sup. 11 W 2952	Sept. 23-14	Ores and concentrate stations and ports of call in B.C. to smelters.
W 1964 cancels A.R. & I 190	W 3224 cancels W 2380	Sept. 1-14	Sugar Raymond, Alta., to C.P. stations.
Sup. 16 W 1879	Sup. 16 W 3026	Various dates	Class and commodity rates Winnipeg, Brandon, Portage la Prairie, to B.C. coast points.
W 1958 cancels Various Tariffs.	W 3220 cancels Various Tariffs.	Sept. 1-14	Commodity mileage tariffs.
E 2847 cancels	E 2475 cancels	Sept. 10-14	Pulpwood C.L., C.P. stations to points in U.S. Advance. Reduction.
E 2622 Sup. 2 E 2326	E 2285 Sup. 2 E 1926	Sept. 15-14	Class rates C.P. stations to points on N.Y.C. & H.R.R.R. and West Shore R.R. Reissue. Reduction.
E 2855 cancels E 2851	E 2483 cancels E 2479	Aug. 20-14	Class and commodity rates C.P. stations to Valcartier Jct. and Valcartier Military Camp. Reduction.
Sup. 5 E 1233	Sup. 5 E 814	Sept. 21-14	Green apples and pears, C.L., C.P. stations to Montreal and Ottawa. Reissue. Cancellation.
Sup. 17 E 2646	Sup. 17 E 2262	Aug. 26-14	Switching and interswitching at C.P. stations. Reduction.
Sup. 20 E 2324	Sup. 20 E 1924	Aug. 29-14(R) Sept. 28-14(A)	Commodities Eastern Canada stations to Port Arthur, Fort William and Westfort. Advance. Reduction.
Sup. 40 E 2713	Sup. 40 E 2330	Aug. 28-14	Commodities between C.P. stations. Reduction.

Canadian Pacific Railway.

C.R.C.	R.R. No.	Effective.	Description.
E 2857 cancels E 1495	E 2485 cancels E 1080	Sept. 27-14	Class rates Atlantic Div. stations to points in U.S. Reduction. Advance.
Sup. 26 E 2529	Sup. 26 E 2133	Oct. 3-14	Commodities C.P. stations to points in U.S. Reduction.
Sup. 75 E 2559	Sup. 75 E 2166	Sept. 5-14	Building material between C.P. stations. Reduction.
Sup. 43 E 2713	Sup. 43 E 2330	Sept. 8-14	Commodities between C.P. stations to and from connecting lines and to Maritime Province points. Reduction.
Sup. 1 W 1953	Sup. 1 W 3215	Sept. 1-14	Class and commodity rates between Port Arthur, Fort William and stations west.
Sup. 1 W 1969	Sup. 1 W 3235	Various dates	Commodities between C.P. Western line stations.
Sup. 3 W 1953	Sup. 3 W 3215	Sept. 7-14	Class and commodity rates between Port Arthur, Fort William and points west.
E 2845 cancels E 2395 2806	E 2472 cancels E 1995 2431	Sept. 7-14(R) Oct. 7-14(A)	Class and commodity rates (all rail) between stations west of Port Arthur and stations east thereof.
Sup. 2 E 2470	Sup. 2 E 2360	Aug. 22-14	Commodity rates points in Eastern Canada to B.C. coast points.

Grand Trunk Railway.

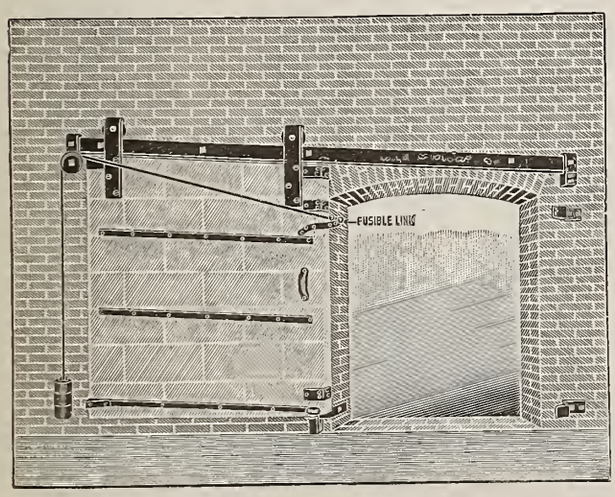
Sup. 19 E 2457	Sup. 19 S 86	Sept. 19-14	Interswitching at G.T. stations. Reduction.
Sup. 6 E 1641	Sup. 6 CX 24	Aug. 17-14	Exhibition freight. Reduction.
Sup. 3 E 2915	Sup. 3 C.D.154	Aug. 17-14	Bridge iron and steel, St. Paul, Dominion and Lachine to Gloucester Jct., N.B. New rate.
Sup. 23 E 2684	Sup. 23 C.U. 72	Sept. 15-14	Commodities stations in Canada to points in U.S. Advance. Reduction.
Sup. 51 E 2855	Sup. 51 C.Y. 31	Sept. 16-14	Steel bars, C.L., Hamilton to Merritton, St. Catharines and Thorold. Advance.
Sup.237 E 2552	Sup.237 C.D. 65	Aug. 25-14	Building material between G.T. stations. Reduction.
Sup.239 E 2552	Sup.239 C.D. 65	Aug. 28-14	Sewer pipe, C.L., Hamilton to Leamington, 9c. per 100 lbs. Reduction.
Sup. 52 E 2855	Sup. 52 C.Y. 31	Oct. 1-14	Iron commodities, C.L., Gananoque to Hamilton and Toronto. Advance.
Sup.241 E 2552	Sup.241 C.D. 65	Sept. 1-14	Slag, C.L., Port Colborne to Welland, 2c. per 100 lbs. Reduction.
Sup. 13 E 254	Sup. 13 G.B.Y. 7	Oct. 1-14	Iron commodities Belleville to G.T. stations. Advance. Reissue.
Sup. 12 E 1433	Sup. 12 C.I. 52	Oct. 1-14	Iron commodities Montreal to G.T. stations. Reissue. Advance.
Sup. 57 E 150	Sup. 57 G.B.Y.5	Oct. 1-14	Iron commodities Brantford, Hamilton, London, etc., to G.T. stations. Reduction. Advance.
Sup. 2 E 2867	Sup. 2 C.I. 152	Oct. 1-14	Iron pipe fittings and structural iron or steel, Sarnia to stations in Canada. Advance. Reduction.
Sup. 20 E 2457	Sup. 20 S 86	Oct. 3-14	Interswitching at G.T. stations. Reissue.
Sup. 54 E 2855	Sup. 54 C.Y. 31	Sept. 14-14	Drop forgings, iron or steel, L.C.L. Welland to Quebec, 36c. per 100 lbs. Reduction.
Sup. 24 E 2684	Sup. 24 C.U. 72	Oct. 10-14	Commodities between G.T. stations and to points in U.S. Advance. Reduction.
Sup. 5 E 2779	Sup. 5 C.P.102	Sept. 15-14	Paper commodities between stations in Canada. Reduction.

Canadian Northern Railway.

W 804 cancels W 615 652	W 1458 cancels W 1085 1149	Sept. 1-14	Lime, cement, plaster, etc., Winnipeg, Port Arthur, Calgary, etc., to C.N. stations.
W 801 cancels 380 381 439 485 486 526 W 675 677 768	W 1475 cancels 628 629 727 820 821 900 W 1200 1209 1408	Sept. 1-14	Commodities between C.N. stations Port Arthur and West.

Erie Railroad.

Sup. 22 302	Sup. 22 B 2900	Oct. 7-14	Basis of rates to Canadian points.



MAXIMUM FIRE PROTECTION AND MINIMUM INSURANCE PREMIUM

Are Only Secured By Using

UNDERWRITERS INSPECTED HARDWARE LABORATORIES

Look For The Label

Richards Monarch A

Fire Door Hardware

Overhead Carrying Systems

Use R-W Trolley Track and Hangers for all Sliding Warehouse Doors. Only right way to hang heavy doors: Catalog on request

Richards-Wilcox

CANADIAN COMPANY, LTD. LONDON, ONTARIO.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

263. **Furniture.**—A Newfoundland firm asks for names of Ontario and Quebec manufacturers.

264. **Maple Syrup.**—Manufacturers are asked to quote prices c.i.f. Newfoundland.

265. **Evaporated Milk.**—Inquiry is made by a Newfoundland importer for names of Canadian manufacturers.

266. **Trunks.**—A Newfoundland merchant asks for names of Canadian manufacturers of trunks, suit cases, etc.

267. **Red Fir Poles.**—An inquiry is made for the addresses of Canadian sawmills who can supply red fir poles suitable for telegraph and telephone posts.

268. **Brooms.**—A manufacturers' agent in Demerara, B.G., desires to represent Canadian manufacturers or exporters of brooms, etc.

269. **Dash Leather.**—A firm in Barbados in the livery business invites correspondence with Canadian firms exporting dash leather.

270. **Papers, Print.**—A printing and publishing firm in Barbados would like to receive quotations on Canadian "news" print paper.

271. **Foodstuffs.**—Canadian exporters of foodstuffs are invited to correspond with firm of commission merchants in Santiago de Cuba.

272. **Barbed Wire.**—A firm in Santiago de Cuba wishes to represent Canadian manufacturers of barbed wire.

273. **Scarfs.**—Canadian manufacturers of scarfs are invited to correspond with Havana firm.

274. **Collars.**—A Havana firm of brokers inquires for Canadian manufacturers of collars.

275. **Raincoats.**—Inquiry is made by Havana broker for the names of Canadian manufacturers of raincoats.

276. **Flavoring Extracts.**—A Newfoundland commission agent inquires for names of Canadian manufacturers.

277. **Engines and Boilers.**—A firm in Johannesburg, with branches throughout the Transvaal, Free State and Natal, desires to receive catalogues, quotations and full particulars from Canadian manufacturers of small portable engines and vertical boilers, in capacities of 2, 4, and 6 h.p., suitable for small irrigation plants and general farm purposes. Quotations preferred f.o.b. Montreal and St. John.

278. **Corn Whisks.**—A London company is in the market for small hand corn whisks and invites samples and quotations from Canadian manufacturers.

279. **Detachable Link Belting.**—A Glasgow house is desirous of getting in touch with a Canadian manufacturer of detachable link belting.

280. **Asbestos.**—A Glasgow importer of crude and fibre asbestos is open to do business with reliable Canadian shippers.

281. **Mica.**—A Glasgow importer of mica, thumb-trimmed and sheets, is anxious to make connection with first-class Canadian house in a position to ship.

282. **Oils.**—A paint and oil house, Glasgow, wishes to purchase lubricating oils from a first-class Canadian firm.

283. **Asbestos.**—A Glasgow firm, importers of asbestos millboards, cloth, lagging and slates is anxious to make connection with reliable shippers of these goods.

284. **Representative in South America.**—A gentleman who speaks Spanish fluently and has had several years' experience in Central America desires to represent Canadian firms in the Latin American Republics.

285. **Jewellery Manufacturers' Machines and Dies.**—A firm of jewellery manufacturers in Delhi, India, desires to be furnished with catalogues of Canadian manufacturers of machines and dies for the manufacture of jewelleries such as brooches, lockets, buttons, bracelets, chains, full and semi-hollow beads, boxes, etc. etc.

286. **Iron and Steel Manufacturers.**—A London firm of builders' merchants have a large market for Canadian nails, pipes and other iron and steel manufactures, and wish to get into immediate touch with manufacturers. A director of the company is in Canada now.

287. **Wood-pulp.**—In view of the possible shortage of paper in Scotland, inquiry is being made for large supplies of Canadian wood-pulp, and requests are received for names of manufacturers able to make immediate shipments.

288. **Pit Wood.**—Inquiry is made for name of Canadian manufacturers of pit wood.

289. **Pit Timber.**—A colliery company in the north of England wishes to get offers of pit timber (c.i.f.) from Canadian shippers. Specifications at Department of Trade and Commerce, Ottawa.

290. **Flour.**—An English firm in Christiania, Norway, reports a good opening for Canadian flour, and would like to secure a first-class agency.

291. **Flour, Bran and Mill Offals.**—A London firm is open to purchase large quantities of flour, bran and mill offals for shipment to Belgian ports, and invites offers from Canadian shippers.

292. **Felt Paper Fibre.**—A London manufacturing company is open to contract for supplies of felt paper fibre, and invites samples and quotations from Canadian manufacturers able to fill orders promptly. Samples can be inspected at the Department of Trade and Commerce, Ottawa.

Overtime and Undertime

These are "jumpy" days for the manufacturer. Rapid fluctuations in unusual quarters are the order of the day. It is more than ever necessary to have a power plant that responds with economy to the changes in demand.

With Hydro Power you get full efficiency delivered right at the machine. No 30% waste in turning yards of shafting, "idlers" and through departments running on restricted time.

You save big interest and depreciation charges on a privately owned plant which, remember, you built to take care of your greatest possible demand. Are you using it to the full to-day?

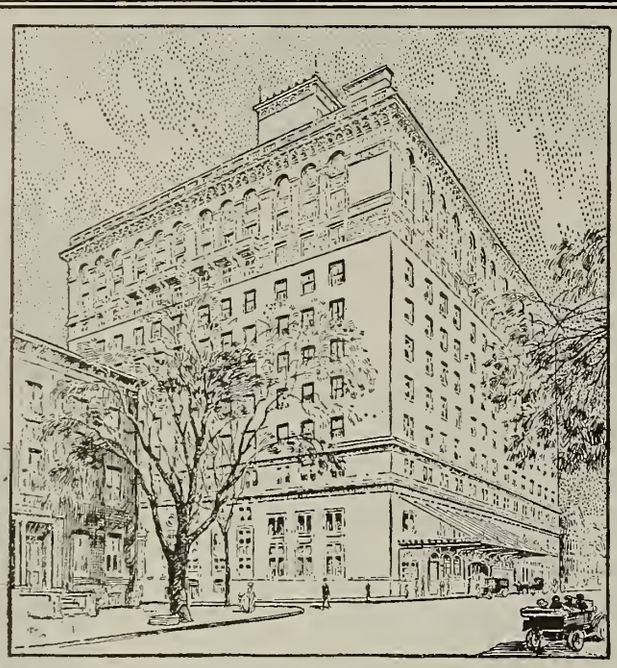
Hydro power enables any one department to run full or short time, independently of any other. It permits night work at the shortest notice. It is clean, safe, reliable, calls for less labor, saves space, and there's always as much or as little as you want, just when you want it.

To start on Hydro you needn't scrap the whole power plant. Let us instal it by degrees---say in one department to commence with, until you "see results."

We are at the other end of your telephone wire.

The Toronto Hydro-Electric System

226 YONGE STREET PHONE ADEL. 2120



The Ritz-Carlton Hotel

SHERBROOKE STREET, MONTREAL

offers the Comfort, Service and Cuisine of the famous Ritz chain of Hotels and Restaurants round the world, at similar rates to those of other leading hotels in Canada.

3

293. **Aspen, Poplar, Etc.**—An important Swedish match manufacturing enterprise wishes to ascertain the possibility of obtaining from Canada supplies of aspen, poplar and similar timber, more particularly for the production of match boxes.

294. **Washing Machines and Wringers.**—A Glasgow purchasing agent is desirous of making connection with Canadian manufacturers of washing machines, wringers, etc.

295. **Ironmongery, Hardware and House Furnishing.** A Glasgow importer is open for agencies for Canadian manufactured goods suitable for ironmongery, hardware and house furnishing trade.

296. **Micanite.**—A Manchester firm manufacturing electrical insulating materials, etc., wishes to be placed in touch with Canadian manufacturers of micanite in the following forms, viz., hard brown moulding sheet, white commutator sheet, paper, and cloth, who are prepared to quote c.i.f. Manchester.

CANADA'S EXPORTS STILL ON INCREASE.

Canadian export trade is still on the increase. During the first four months of the present fiscal year, ending with July, exports totalled $134,866,644, an increase of $4,431,257 as compared with the same period last year. Imports totalled $172,041,713, a decrease of $55,627,860. The total trade for the four months was $306,908,377, a decrease of $51,196,503.

The increases in exports were for the most part in animal produce and manufactures. For the twelve months ending July the total trade was $1,061,356,504, a decrease of nearly $37,000,000.



NO TRESPASSING !

No use putting up this sign, unless you put up a fence. People who are on the prowl for what they can find or steal, won't pay any attention to it. But if you have good, sturdy fence, you just naturally keep prowlers away. He has to be a persevering trespasser to get

BEYOND STANDARD FENCE

Such a fence, for instance, as is shown in this picture.

Just now we are doing a lot of work fencing factory grounds. Why not fence in ***your*** factory? Write for an estimate, giving full particulars.

Standard Tube and Fence Co., Limited
WOODSTOCK, ONTARIO

Making a Site for YOUR New Factory



A few of the 1000 Men engaged on the Development of the Toronto Harbor Industrial District.

The Most Modern Factory District in the World

Industries Locating in this District will enjoy

Three Railways **Free Sidings** **Free Interswitching**

TORONTO HARBOR COMMISSIONERS

Alex. C. Lewis, *Secretary*

50 Bay Street - - Toronto, Canada

THE CANADIAN BANK OF COMMERCE

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L.
President.

ALEXANDER LAIRD, General Manager.
JOHN AIRD, Assistant General Manager.

Capital . . .	$15,000,000
Rest	$13,500,000

FOREIGN BUSINESS

This Bank offers unsurpassed facilities to those doing business with foreign countries. It is specially equipped for the purchase and sale of Sterling and other Foreign Exchange Drafts and Cable Transfers and for the financing of imports and exports of merchandise.

Commercial credits, Foreign Drafts, Money Orders, Travellers' Cheques and Letters of Credit issued, available in all parts of the world.

Collections effected promptly at reasonable rates.

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . .	$25,000,000
Capital Paid up	$11,560,000
Reserve & Undivided Profits	$13,000,000
Total Assets	$180,000,000

HEAD OFFICE, MONTREAL

BOARD OF DIRECTORS

H. S. Holt, President E. L. Pease, Vice-President
E. F. B. Johnston, K.C., 2nd Vice-President

Wiley Smith	D. K. Elliott	Wm. Robertson
Hon. D. MacKeen	W. H. Thorne	A. J. Brown, K.C.
Jas. Redmond	Hugh Paton	W. J. Sheppard
G. R. Crowe	T. J. Drummond	C. S. Wilcox
	A. E. Dyment	

OFFICERS

E. L. Pease, General Manager
C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

Branches in every Province of the Dominion of Canada and in Newfoundland; in Havana and throughout Cuba, Porto Rico and Dominican Republic; Bahamas, Nassau; Barbados, Bridgetown; Jamaica, Kingston; Trinidad, Port of Spain and San Fernando; British Honduras, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY — Corner William and Cedar Sts

Savings Department at All Branches

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

BRITISH COLUMBIA.

Vancouver, B.C.

The latest addition to the modern office buildings in this city is the fifteen storey Standard Bank Building, which has a frontage of 78 feet on Hastings Street and 120 feet on Richards Street.

Victoria, B.C.

The city's permission has been asked by the Imperial Oil Company, Limited, for the erection of a storage plant, consisting of warehouse, office building, pipe lines and storage tanks.

NEW BRUNSWICK.

Fredericton, N.B.

The firm of Concrete Builders, Limited, which was organized here in the spring of 1914, has proved a live and healthy industry for this place. The plant of this company has been running full time and a working force of about thirty men has been retained.

St. John, N.B.

The plant of the Canada Wire Nail Company is about to be put in operation.

A great amount of work has been accomplished in the past three months by the Maritime Dredging and Construction Company on the contract for the West Side piers.

NEWFOUNDLAND.

St. John's, Nfld.

As a result of the war there has been a brisk demand for the product of the paper and pulp mills of Newfoundland and it is expected that the mills will be obliged to add to their present equipment.

NOVA SCOTIA.

Sydney, N.S.

There is no truth in the rumor that the Dominion Steel Company has closed down its plant here. From the general manager comes word that despite a reduction in the staff there are still 1,600 men at work.

ONTARIO.

Arnprior, Ont.

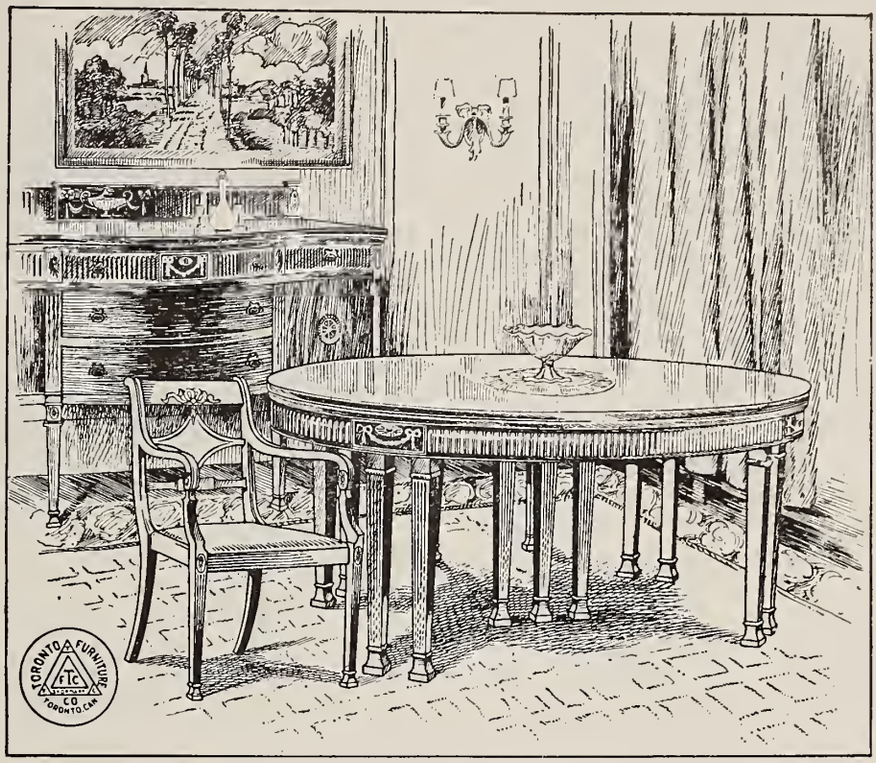
Machinery has been purchased in Philadelphia for installation in the new factory of the Arnprior Felt Company.

Caledonia, Ont.

The Ebsary Fireproofing Company, Confederation Life Building, Toronto, has tendered for the supply of mill equipment for the manufacture of gypsum blocks now in course of construction here.

Fort Erie, Ont.

Mr. H. J. Harvey, the United States consul, reports that a $100,000 safe and register company has so many orders ahead that it has been obliged to increase the size of its factory. A register has been produced which is fireproof and is sold at a moderate price.



AN ADAM DINING-ROOM SUITE IN SOLID MAHOGANY

FINE PERIOD FURNITURE

"MADE IN CANADA"

The Toronto Star, speaking editorially of the unfounded preference shown for imported goods, says :

Is it not a belated and unsound instinct that indulges in a desire for something that has no other merit than that it is "different" from what is Canadian made, and, so, a bit "exclusive"? . . . . Are we not—and we are most of us in this respect sinners more or less—essentially disloyal to our own country when we do not take pains to see that our more important purchases help build up Canadian industries rather than their rivals? . . . . Imports and loans from abroad to balance with their incidental commissions and charges paid outside this country are good enough in their place, but trade of maximum value to Canada is trade *within* Canada. Why not, therefore, go in for a more intensive cultivation of own trade resources ?

We do not plead for a patronage of Canadian furniture at any price. We do not urge a buyer to give preference to our goods simply because they are made in Canada. That would be unjust and foolish. But we do believe that he ought to accord to our furniture, the same careful consideration as he would to any imported productions. That much we feel we are reasonably entitled to.

Let any manufacturer then who proposes to buy furniture, compare closely any of our designs, line for line, wood for wood, finish for finish, workmanship for workmanship, price for price with any imported line and we shall be very much mistaken, if, everything considered, he doesn't give an unhesitating decision in favour of ours.

In strict justice to yourself and to us we ask you to make this comparison the next time you are buying furniture for the home. The leading dealer in your locality has our furniture on his floors or will be glad to show you a portfolio of photographs of our complete line for your approval and selection. We will gladly send you his name on request, also a copy of our book on Period Furniture.

This shop-mark — found on all our furniture — signifies our proud acceptance of full responsibility for the design, materials and workmanship.

TORONTO FURNITURE CO., LIMITED

Showrooms and Shops: DUFFERIN ST., TORONTO

MEMBERS OF THE HOME MARKETS ASSOCIATION

Fort William, Ont.

The plant of the Steel Company of Canada, on which construction was started last year and not completed owing to the dull manufacturing season, has resumed operations and a large gang of men is at work on the completion of the building. The plant will be ready for operation between November 15th and December 1st.

The Dominion Government propose building an addition to its elevator, doubling its capacity, which is now 3,250,000 bushels.

The Fort William Starch Works is to resume manufacturing operations within the course of two weeks.

Ingersoll, Ont.

Operations have been commenced on a new broom factory for Thomas and Robertson of St. Thomas.

Mimico, Ont.

Red roofing tile are being successfully manufactured for the first time in the history of the brick and tile making industry of the Dominion. The Ontario Government owns this plant near Mimico.

Niagara Falls, Ont.

The Dominion Chain Company are proceeding with the erection of their factory here.

Ottawa, Ont.

Owing to the loss sustained by the big fire in July last the Canada Cement Works at Hull have closed down entirely.

St. Catharines, Ont.

A by-law to grant a fixed assessment of $10,000 for ten years, and a five-acre site to the Marathon Rubber Company of Akron, Ohio, to establish a $50,000 factory has been carried by the ratepayers.

Toronto, Ont.

The cost of the registry office will be $400,000. Motion has been made to have a by-law covering the amount introduced into council.

Welland, Ont.

M. Beatty & Sons, Limited, recently launched another dipper dredge at their shipyards on the Welland Canal for the Randolph Macdonald Company, Limited, Toronto.

Windsor, Ont.

The Remington Arms Company are making a $20,000 addition to their factory.

A factory is being built here by J. T. Wing & Company.

QUEBEC.

Chandler, Que.

The St. Lawrence Pulp & Lumber Corporation are making extensive progress with the construction of their pulp and saw mills.

Montreal, Que.

J. P. O'Shea & Co., Limited, are building an addition to their factory to cost about $50,000.

Bedford Mfg. Co., Limited, Bedford, Quebec, manufacturers of agricultural tools, are rebuilding their plant which was recently destroyed by fire.

Butterfield & Company, Rock Island, Que., are putting up a new factory plant.



You've heard it said

many a time "Oh, well, they're all alike; one's about as good as another."

But that isn't true.

For, as sure as there are a dozen different systems of removing condensation there is bound to be one just a little more efficient than the others. That's why we want you to consider the

Morehead Back to Boiler SYSTEM

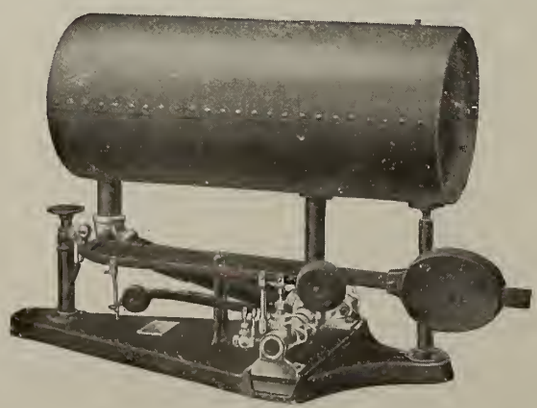
Now, the "Morehead way" is different. Not only does it remove condensation from **any kind** of steam apparatus but it feeds this condensation to the boilers—pure and hot—at a temperature up to 330 degrees Fahr.

Some difference, eh! and some saving in fuel, time and labor.

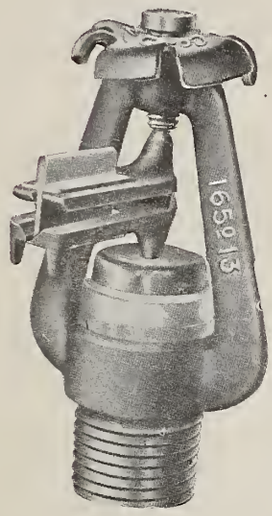
Just let our engineers give you a few more facts and reasons why the Morehead is different. Write them to-day.

Canadian Morehead Mfg. Co. Limited
WOODSTOCK, ONT.

217



DISASTROUS FIRES PREVENTED



THERE is one sure way of preventing the destruction of your factory by fire. It is so certain in its action that Insurance Underwriters allow a rate of insurance on a protected building from 40 to 80 per cent. lower than on an ordinary unprotected structure.

Manufacturers' Automatic Sprinklers

afford real protection from fire. They can, and should be installed in either old or new buildings.

They save their cost in from three to five years in the reduction of insurance premium.

THE GENERAL FIRE EQUIPMENT COMPANY
LIMITED

72 QUEEN ST. EAST TORONTO, CANADA

Montreal, Que.

Gordon, Ironsides & Fares, of Winnipeg, are building a large packing house in Montreal on Iberville Street.

J. H. McComb, Limited, manufacturers of roofers' supplies, are occupying new premises at 161 Shannon Street, their old plant having been damaged by fire.

Quebec, Que.

It is understood that the erection of a concrete and steel plant is being considered by the Masson Company.

The Tuckett Tobacco Company will do nothing to their projected factory until the fall or next spring.

Shawinigan Falls, Que.

The mill of the Belgo-Canadian Pulp and Paper Company is undergoing extensive alterations and additions. In the magnificent modern building which has been built to accommodate stock, machine plant, screens and offices, the very finest equipment is to be seen. A general speeding-up is being undertaken.

A new power plant will be installed by the Belgo-Canadian Pulp and Paper Company.

SASKATCHEWAN.

Estevan, Sask.

The Estevan Brick & Coal Company is making arrangements for the installation of new dies at the brick plant here for the making of hollow brick and other kinds of hollow ware.

A factory site has been secured by the Denison Fireproofing Company, of Mason City, Iowa, and the construction of a hollow brick plant will be started immediately.

The Canada Metal Co., Limited

Manufacture in Canada

Our Babbitt Metals Give Excellent Service



We are Proud of the Goods We Manufacture

FOR GENERAL MACHINERY BEARINGS
TRY
Harris Heavy Pressure
THE BABBITT METAL WITHOUT A FAULT
WE HAVE EVERYTHING IN METALS
Ask for Our New Catalogue. Mailed FREE on Request

THE CANADA METAL CO., LIMITED
Head Office and Factory, Toronto Branch Factories, Montreal, Winnipeg

MESSAGE FROM ENGLAND'S FOREMOST FINANCIAL AUTHORITY

London, Sept. 15.—Sir George Paish, until recently editor of the Statist, but who resigned to place his services at the disposal of the British Government, says :

"Orders should be given, factories should be run, and everything should be arranged to maintain, as far as possible, the productive power and the income of the country.

"Therefore, it is of vital importance that, as far as possible, the events that are now taking place should not interfere with the daily life and the daily work of the nation.

"It cannot be too clearly realized that the nation's income is dependent upon its daily work and its daily production, and that at a time such as the present it is desirable that everyone should work harder and be more productive, in order that we may have the income, and therefore the money, with which to meet any expenditure and any burden that may be placed upon us."

Canada's Industries

In 1912 Canada had $1,247,572,609 invested in Manufacturing.

The value of manufactured products in 1912 amounted to $1,165,975,639.

There are employed in Canadian Manufactories 515,203 people, and the wages paid in 1912 amounted to $645,288,733.

For a great many years the Canadian people, realizing the manifest advantage of Canada being a manufacturing, as well as an agricultural country, have maintained a tariff for the protection of Canadian industries and the employment of Canadian people.

The Canadian industries, upon the whole, have developed and expanded, and have participated in the general prosperity of the country during the past ten years.

Notwithstanding the immense amount of capital invested in industrial enterprises in this country, last year the people of Canada, owing to industrial inactivity, were forced to buy from other and more progressive countries merchandise and products to the value of almost $700,000,000.

That is, Seven Hundred Million Dollars of Canadian money is paid annually for merchandise and products from other countries.

One of the large items of this big sum was for iron and steel and the products manufactured therefrom, amounting to about $138,000,000.

Canada has numerous iron and steel industries, with immense capitalizations, yet last year, while these industries were only in partial operation, the Canadian people were forced to purchase steel and iron and their products to the extent of $138,000,000.

The above is in face of the fact that, in addition to the high protective tariff the steel industries have enjoyed, the Canadian people have given to them millions of dollars in bounties.

Of the $700,000,000 representing the imports of Canada last year, much of this vast sum could have been spent within Canada, giving employment to the people and adding to the wealth and resources of the nation.

Last year, with the cotton industries of Canada in a state of suspended animation, the people of Canada were forced to send $27,345,112 to the factories of foreign countries for cotton goods.

There are in Canada 26 cotton factories, and when in operation they employ 13,000 people, with an annual pay roll of $5,000,000.

Because of industrial inertia, last year, half a million Canadian dollars were sent to one country for corsets.

Because of the inactivity of Canadian industries half a million dollars were sent to Germany for socks, and still there were supposed to be people unemployed in Canada.

With Canadian mills and factories working short time, millions of dollars last year were sent by the Canadian people to the factories of foreign countries for woollen products, hats, caps, shirts, socks and stockings, collars, gloves, underwear, boots and shoes, men and women's apparel, laces and embroideries, carpets, watches and clocks, breakfast foods, bricks, drain pipes, brooms and brushes, rope and twine, sheets and bedding, thread, towels, yarns, glass, rubber goods, nails and wire, cutlery, agricultural implements and many other articles essential to Canadian life.

A percentage of last year's $700,000,000 imports is cut off.

Canada has the mills and factories to supply the deficit, if they are put into full operation.

Canada's imports last year represent about $100 for every man, woman and child in the Dominion.

If Canadian industries profit by the lessons of the past, and produce on broader and more vigorous lines, the country will profit immeasurably.

The people of Canada should take heed of Germany's industrial commandments.

One of the German Commandments says : "Never forget that when you buy foreign articles your own country is poorer," and "Let no foreign flattery distract you from this precept."

If every Canadian bought goods "Made in Canada," Canadian industries would be running to full capacity ; Canadian workers would have full employment, and Canada's wealth, prosperity and prowess would multiply.

The Made in Germany movement made Germany, commercially, the second nation of the world.

The Made in Canada movement will make Canada commercially.

One of the most patriotic services Canadian people can render to the Empire is to insist on purchasing products made in Canada.

THE CANADIAN STREET CAR ADVERTISING CO., LIMITED

Montreal ∴ Toronto ∴ Winnipeg

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASAVIAL MATERIALS
*The Ford-Smith Machine Co., Ltd., Hamilton.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.

ACETYLENE WELDING APPARATUS
*L'Air Liquide Society, Montreal, Que.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.
Hough Lithographing Co., Ltd., Toronto.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AGRICULTURAL IMPLEMENTS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

AIR HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

AIR WASHERS
*The Canadian Service Co., Windsor, Ont.

ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE
E. L. Drewry, Winnipeg, Man.

ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS
*T. Pringle & Sons, Montreal.

ASBESTOS:
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS BUILDING LUMBER
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CEMENT SHINGLES
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CORRUGATED SHEATHING
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS MILLBOARD
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS PRODUCTS;
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS ROOFING SLATES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS SHEATHING:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS THEATRE CURTAINS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.

AUTOMATIC MACHINERY
*The Ford-Smith Machine Co., Ltd., Hamilton.

AUTOMATIC SPRINKLERS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

AWNINGS
*Smart-Woods, Ltd., Montreal.

AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS
*Smart-Woods, Ltd., Montreal.

BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal, Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN
*Berry Bros., Ltd Winnipeg, Man.

BALL BEARING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

BANK AND OFFICE RAILINGS
*The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston Ont.

BANK RAILINGS and CAGES:
*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Toronto.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Goldie & McCulloch Co., Ltd., Gadt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville, Ont.
*Smart-Woods, Ltd., Montreal.

BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER
E. L. Drewry, Winnipeg, Man.

BELT FASTENERS
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELT DRESSING:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
J. L. Goodhue & Co., Danville, P.Q.
Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Goodyear Tire & Rubber Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

BELTING (stitched cotton duck)
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS
Samuel May & Co., Toronto.

BILLIARD TABLES
J. D. Clark Billiard Co., Winnipeg.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:
*A. C. Leslie & Co., Montreal.

BLANK BOOKS:
*Morton, Philips & Co., Montreal.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford Ont.

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.

BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS
Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Canadian Allis-Chalmers, Limited, Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, London, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Jenckes Machine Co., Sherbrooke.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, heating:
*The Goldie & McCullough Co., Ltd. Galt.

BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.

BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford

BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BOILER STANDS
Anthes Foundry Ltd., Toronto.

BOLSTERS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:
*The National Acme Mfg Co., Montreal.

BOLT CUTTERS:
*Canada Machinery Corporation, Galt.

BOLTS AND NUTS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co. Ltd., Stratford, Ont.

BOOKLETS
Stone Limited, Toronto.
R. G. McLean, Toronto.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,
Ames-Holden-McCready, Ltd., Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

*For Display Advertisement See Index, Page 215

NEW MANUFACTURING COMPANIES.

The following manufacturing companies have been recently incorporated for manufacturing purposes:

Western Woodenware, Ltd., Winnipeg, Man.....	$20,000
Pacific Wall Bed Co., Ltd., Winnipeg, Man.....	60,000
The Safety Tire Co., Ltd., Quebec, Que.....	1,000,000
Colonial Brewing Co., Ltd., Vancouver, B.C.....	400,000
The St. Lawrence Canning Co., Ltd., Montreal, Que.	50,000
Cazen Cigarette Machine Co., Ltd., Montreal, Que...	100,000
Noble Air Pump Co., Ltd., Toronto, Ont.	25,000
Canadian Shipbuilding & Dry Dock Co., Ltd., Owen Sound, Ont.	2,000,000
Warwick Wheel Co., of Canada, Ltd., London, Ont..	100,000
Curtis Fire Systems, Ltd., Berlin, Ont.....	250,000
Algoma Timber & Lumber Co., Sault Ste. Marie, Ont.	120,000
Canada Yeast & Mfg. Co., Ltd., Toronto, Ont.	100,000
Port Dover Canning Co., Ltd., Toronto, Ont.	200,000
Hermann Johnston Motors, Ltd., Toronto, Ont.	500,000
The Martens-Freeman Co., Ltd., Toronto, Ont.....	200,000

NOTICE.

"The proprietor of Patent No. 143,531 of 1912, for "Improvements in Manufacture of Rubber Articles," is desirous of disposing of the patent rights; is prepared to manufacture said patented invention to order, or will negotiate for the grant of licenses to work thereunder. For particulars apply to Fetherstonhaugh & Company, 10 King Street East, Toronto, Canada."

TO ENLARGE RIFLE FACTORY.

The Ross rifle factory at Quebec is to be enlarged considerably to meet the demands made upon it. The capacity of the factory is 200 rifles per day, but more than these are required, and at once. A greater supply of ammunition is also needed.

BITUNAMEL

PREVENTS CORROSION

CERTAINLY, but think for a moment what this means. It means that the great objection to steel construction is removed; that the alarming and dangerous condition of some of the early built structures need not be repeated; and that architects and builders when they specify or use steel construction coated with Bitunamel have a material that experience has proved to be absolutely impervious to rust.

It is gas, acid and alkali proof, and is employed on many large ocean liners as a protection against the action of salt water.

The AULT & WIBORG CO. of Canada, Limited

Varnish Works, Toronto

Montreal Winnipeg Cincinnati Philadelphia New York Buffalo
Chicago Minneapolis San Francisco London Paris

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EVERY TRAVELLER SHOULD CARRY HIS FUNDS IN DOMINION EXPRESS TRAVELLERS CHEQUES

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Not only do these cheques guarantee you against loss, but they show you the exact amount you will receive in foreign money in the various countries, which is a very important matter to a stranger in a foreign land.

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If the Cheques are Lost, Stolen or Destroyed we Refund Your Money. The Security Alone is Worth More to You Than the Cost of the Cheques, viz., 50 Cents per $100.

For further particulars apply to any office of the

Dominion Express Company

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SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT

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Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.
Samuel May & Co., Toronto.

BOXES, cellular board:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
G. & J. Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAIDS AND NOVELTIES:
The Moulton Mfg. Co., 236 Craig St. E., Montreal.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS GOODS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
*Tallman Brass & Metal Co., Hamilton.

BRASS PLATES
Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS
Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

BRICK
National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway
*Canada Foundry Co., Ltd., Toronto.
Canadian Allis-Chalmers Ltd., Toronto.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters
Geo. Booth & Son, Toronto.

BROOMS
*Boeckh Bros. Co., Ltd., Toronto.
H. W. Nelson & Co., Toronto.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:
*Boeckh Bros., Ltd., Toronto.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd. Toronto.

BUCKET TANKS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUFFING and Polishing Machinery.
*The Ford-Smith Machine Co., Ltd., Hamilton.

BUILDING BLOCKS, vitrified, salt glazed
Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING GRANITE
McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE:
*Northern Electric Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:
*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS
Hough Lithographing Co., Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CALENDARS, ADVERTISING NOVELTIES, etc.
Rolph & Clark, Ltd., Toronto.

CAMERAS
Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

CANVAS
*Smart-Woods, Ltd., Montreal.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PAPER:
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

CARBON PRODUCTS
Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
Canada Carbide Co., Ltd., Montreal, Que.

CARPETS AND RUGS
Toronto Carpet Mfg Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.
*Richard-Wilcox Canadian Co., Limitd, London, Ont.

CARRIERS, box and barrel
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*Wm. & J. G. Greey, Toronto.

CARS, industrial:
*Wm. & J. G. Greey, Toronto.
*Sheldons, Ltd., Galt.

CARTONS, lithographed
Harris Lithographing Co., Toronto.

CASEMENTS, steel
*Herbert Morris Crane & Hoist Company, Ltd.

CASTINGS:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

CASTINGS, brass and bronze:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:
*Galt Malleable Iron Co., Ltd Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CAST IRON PIPE:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

CATALOGUE MAKERS
Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIN BLOCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Herbert Morris Crane & Hoist Company, Ltd.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS
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CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto.

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CIGARETTES AND TOBACCO
Philip Morris & Co., Ltd., Montreal, Que.

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*M. Beatty & Sons, Ltd., Welland, Ont.

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*The General Fire Equipment Co., Ltd., Toronto, Ont.

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*Goderich Organ Co., Goderich, Ont.

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MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

*For Display Advertisement See Index. Page 215

THE NICHOLS CHEMICAL COMPANY, LIMITED

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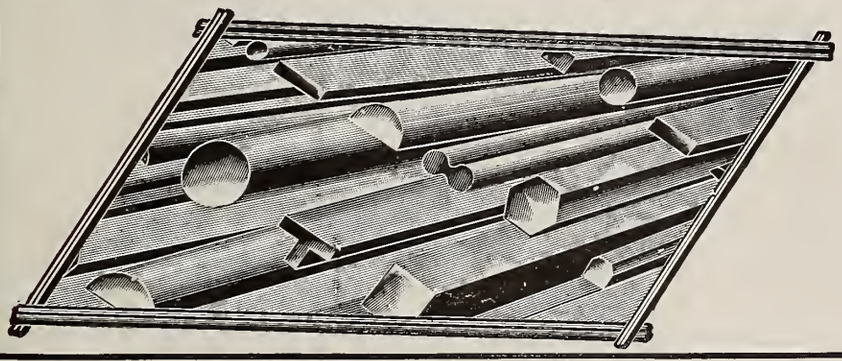
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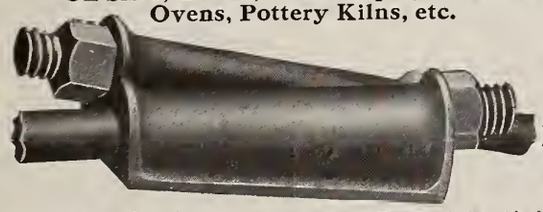
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Music Cabinets.
Catalogue B.

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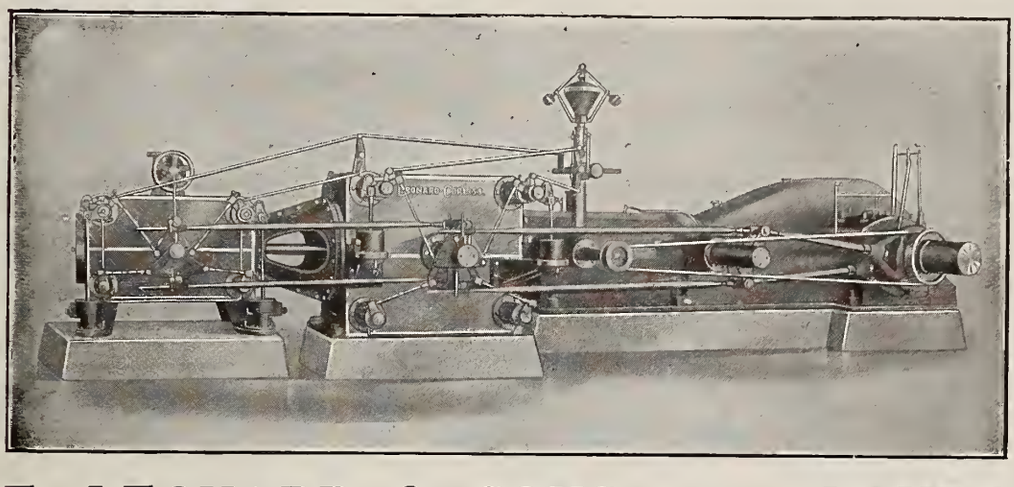
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Peerless Overall Co., Rock Island, Que.
COBALT OXIDE
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.
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*Union Drawn Steel Co., Ltd., Hamilton, Ont.
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Parsons & Parsons Canadian Co., Hamilton, Ont.
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A. Ramsay & Son Co., Montreal, Que.
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Moirs, Limited, Halifax, N.S.
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*M. Beatty & Sons, Ltd., Welland, Ont.
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*Wm. & J. G. Greey, Toronto.
*Jenckes Machine Co., Sherbrooke.
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*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
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*Tallman Brass & Metal Co., Hamilton.
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Canadian Seamless Wire Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
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Sheet Metal Products Co. of Canada, Ltd., Toronto.
COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
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CORK, granulated
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*Martin Corrugated Paper & Box Co., Ltd., Toronto.
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*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
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Hamilton Cotton Co., Hamilton, Ont.
COTTON TEXTILES:
*Dominion Textile Co., Montreal.
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COUPLERS, steel bar:
*Canadian Steel Foundries, Ltd., Montreal.
COUPLINGS:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
CRANES:
*Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
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The Northern Crane Works, Ltd., Walkerville.
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Standard Silver Co., Toronto.
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DYNAMOS.
*Canadian General Electric Co., Ltd., Toronto.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.
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*The Ford-Smith Machine Co., Ltd., Hamilton.
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*Sheldons, Ltd., Galt.
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*Canadian Fairbanks-Morse Co., Limited, Montreal.
ENGINES, steam plowing and threshing
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
Sawyer-Massey Co., Ltd., Hamilton, Ont.

*For Display Advertisement, See Index, Page 215

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FLAGS
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The Moulton Mfg Co., 236 Craig St. E., Montreal.

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Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

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Standard Fuel Co., Toronto.

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Holt, Renfrew, Ltd., Quebec.

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John W. Peck & Co., Ltd., Montreal. Que.

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McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

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Bedford Stove Co., Bedford, Que.

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The George McLagan Furniture Co,. Ltd.. Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd.. Preston. Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford Ont.

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GALVANIZERS
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*Ontario Wind Engine and Pump Co., Ltd., Toronto.

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*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
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*Canadian Westinghouse Co., Ltd., Hamilton.
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Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

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*Canadian Allis-Chalmers, Ltd , Toronto, Ont.
*Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDING and Polishing Machinery
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDING WHEELS:
*The Dominion Abrasive Wheel Co.. Ltd.. New Toronto.
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London. Ont.

GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Limited. Stratford, Ont.

GUY ANCHORS
B. J. Coghlin Co.. Ltd.. Montreal
*Northern Electric Co., Ltd., Montreal, Que.

GYPSUM, crushed
*Albert Mfg. Co.. Hillsborough, N.B

GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HACK SAW FEEDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS TO DETAIL
Wilson Bros., Ltd., Collingwood, Ont.

HARNESS
Lamontagne Ltd.. Montreal, Que.

HATS, men's straw
The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt. Ont.

HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope
The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:
*The Goldie & McCullough Co., Ltd., Galt.

HEATING APPLIANCES:
*Sheldons, Ltd., Galt.
*Northern Electric Co., Ltd., Montreal, Que.

HEATING SYSTEMS
Gurney Foundry Co., Ltd., Toronto.

HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

HINGES:
*The Steel Co. of Canada, Ltd.. Hamilton.

HOISTS
*Northern Crane Works, Ltd., Walkerville, Ont.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.
The Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company. Ltd.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston. Ont.

HOSE, rubber.
*Canadian Consolidated Rubber Co,. Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

HOTEL FIXTURES
Brunswick-Balke-Collender Co. of Canada. Ltd.. Toronto.

HUMIDIFIERS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES
Bawden Machine Co., Ltd., Toronto.

*For Display Advertisement See Index, Page 215

Automatic Coal Savers

"Detroit" RETURN TRAPS

MADE IN CANADA

Save coal by returning condensation from steam coils or steam heated machinery directly to the boiler at practically the same temperature at which it was condensed — *hence less coal is required to convert it into steam again.* The higher the pressure under which your system operates—the higher the temperature of the condensation when it is delivered into the boiler—*if a Detroit Trap System is used.*

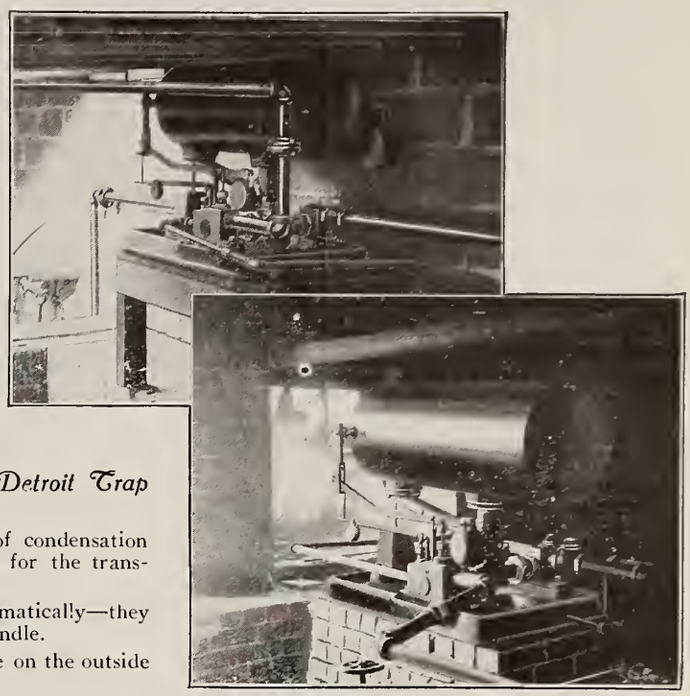
Furthermore—From the fact that Detroit Steam Traps drain every drop of condensation immediately upon its existence—the entire area of the coils or machines is free for the transmission of heat—hence *maximum efficiency* from the system.

Detroit Return Traps are *automatic coal savers* because they operate automatically—they start as soon as the system starts and work as long as there is condensation to handle.

The Detroit Trap has no working parts inside the tank—the few parts are on the outside and interchangeable.

The tilting motion indicates at all times that they are performing their duties properly.

Our Engineering Department will gladly lay out a Detroit Trap System to meet the requirements of your power plant. Catalogue No. 352 tells all about the details. A copy will be mailed to you at your request.



Upper illustration shows a Detroit Return Trap draining an office heating system.
Lower illustration shows Detroit Return Trap draining steam coils of a Lumber Dry Kiln at Fox Bros., Windsor, Ontario.

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WINDSOR, ONTARIO.

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Gandy & Allison, St. John, N.B.
Wm. W. Cary & Co., Calgary, Alta.
W. T. Grose & Co., Winnipeg
E. F. Stevens, Halifax
Lyons Fuel Co., Steelton, Ont.
Peart Bros., Regina
Walker & Barnes, Edmonton, Alta.
David McGill, Montreal

ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

ILLUMINATED SIGNS
Geo. Booth & Son, Toronto.

INCUBATORS & BROODERS
Lee Mfg. Co., Ltd., Pembroke, Ont.

INJECTORS, automatic and autopositive
Penberthy Injector Co, Ltd., Windsor. Ont.

INSULATED WIRE
*Canadian General Electric Co., Ltd. Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

INSULATION, patent seamless cork
The Linde Canadian Refrigeration Co., Ltd., Montreal. Que.

INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS
Standard Clay Products, Ltd., St. Johns, Que.

IRON:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar
Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.
*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:
*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural
The Western Steel & Iron Co., Ltd., Winnipeg. Man.

IRONWORK, ornamental
The Western Steel & Iron Co., Ltd., Winnipeg. Man.

IRON, LEAD AND PUTTY
A. R. Whittall, Montreal.

JAM, canned goods, etc.
E. D. Smith & Son, Limited.

JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.

JOINTERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

JELLY POWDER
S. H. Ewing & Sons, Montreal. Que.

JEWELRY, enamelled souvenir
Caron Bros., Montreal, Que.

JEWELRY, gold filled
Caron Bros., Montreal, Que.

KELSEY WARM AIR GENERATOR
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:
*Sheldons. Ltd., Galt.

KINDLING
Standard Fuel Co., Toronto.

KNIFE GRINDERS:
*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:
*Penman's, Ltd., Paris, Ont.

KNIVES
*E. C. Atkins & Co., Hamilton.
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.

KRAFT, brown paper:
*The New Brunswick Pulp & Paper Mfg. Co., Ltd., Millerton, N.B.

LABELS
Lawson & Jones Ltd., London, Ont.

LABELS, lithographed
Harris Lithographing Co., Toronto.

LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
Sadler & Haworth, Montreal, Que.

LACE, leather:
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LAGER
E. L. Drewry, Winnipeg, Man.

LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:
Canadian Billings & Spencer Ltd., Welland.

LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.

LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD
* The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto.

LEAD PIPE
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER
The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole
The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather
A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.
Clarke & Clarke, Limited, Toronto.

LEATHER, upper
A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED TIN WARE:
*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Company, Ottawa, Ont.
Hough Lithographing Co., Ltd., Toronto.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited Toronto.
Rolph & Clark Ltd., Toronto.

LOCKERS:
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, decking and planking
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).

LUMBER, Douglas fir (Oregon pine)
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, long timbers and spars
Canadian Western Lumber Co. Ltd., Fraser Mills, B.C.

LUMBER, pickets and lath
Canadian Western Lumber Co. Ltd., Fraser Mills, B.C.

LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, staves and heading
Canadian Western Lumber Co. Ltd., Fraser Mills, B.C.

LUMBER, white pine
Gillies Bros., Ltd., Braeside, Ont

MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

MACHINERY, conveying.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
The Northern Crane Works, Ltd., Walkerville.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

MACHINERY, elevating.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
*Wm. & J. G. Greey, Toronto.

MACHINERY, elevating and conveying:
*Wm. & J. G. Greey, Toronto.

MACHINERY, flour mill:
*The Goldie & McCullough Co., Ltd., Galt.
*Wm. & J. G. Greey, Toronto.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY GUARDS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MACHINERY, hoisting, etc.
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.
*M. Beatty & Sons, Ltd., Welland, Ont.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, pumping
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, sawmill
*Canada Machinery Corporation, Ltd., Galt, Ont.
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene, Ont.
W. P. Plant, Hastings. Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, special
Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery
W. P. Plant, Hastings. Ont.

MACHINERY, transmission
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

MACHINERY, wood working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Berlin Machine Works, Ltd., Hamilton.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:
*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting
Spramotor Co., London, Ont.

*For Display Advertisement see Index Page 215

STEAM PLATE PRESSES

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Canadian Carbonate Co., Ltd., Montreal, Que.

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*Dominion Paper Box Co., Ltd. Toronto.

MALT:
*Hiram Walker & Sons, Ltd., Walkerville.

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W. A. Moore Co., Ltd., Meaford Ont.

MAPS AND MAP MOUNTING
The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MATCHES:
*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned
The Wm. Davies Co.. Ltd.. Toronto.

MECHANICAL DRAUGHT
*Canadian Sirocco Co., Windsor, Ont.

MEDICINES, patented and pharmacentical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
Alonzo W. Spooner, Limited, Port Hope, Ont.

METAL CEILING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*A. B. Ormsby, Ltd., Toronto.

METAL, spinning and stamping
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SASH:
*Trussed Concrete Steel Co. of Canada, Ltd.. Walkerville.

METAL SHINGLES:
*Metal Shingle & Siding Co., Ltd., Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

METAL SIDING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*A. B. Ormsby, Ltd., Toronto.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS
Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)
Holt, Renfrew Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)
Holt. Renfrew, Ltd., Quebec, Que.

MONUMENTS
McIntosh Granite Co., Ltd., Toronto.

MORTISERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MOTOR CAR PARTS AND ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.
*Russell Motor Car Co., Ltd., Toronto.

MOTOR-DRIVEN GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MOTORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd,. Hamilton.

MOTORS, D.C.
*Canadian Crocker Wheeler Co., St. Catharines. Ont.
*Northern Electric Co., Ltd., Montreal, Que.

MOTORS, electric (alternating current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co.. Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Gramm Motor Truck Co., Ltd.. Walkerville.

MOULDERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

NAILS:
*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAME PLATES
Patterson and Heward, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NITROGEN
*L'Air Liquide Society, Montreal, Que.

NUTS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons. Aurora, Ont.
*Wm. & J. G. Greey, Toronto.

OFFICE STATIONERY:
*The Montreal Lithographing Co., Ltd., Montreal.

OILS
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS
S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES
Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring
S. F. Bowser & Co., Toronto.

OIL COMPANIES
Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)
*British American Oil Co., Ltd., Toronto.

OILS, Petroleum
*The Imperial Oil Co., Ltd.. Toronto.

OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd., Montreal Que.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

ORGANS
*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.
W. Doherty Piano & Organ Co., Ltd., Clinton.

ORGANS, pipe
Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour
Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

ORNAMENTS (dress, fur, cloak, etc)
The Moulton Manufacturing Co., Limited, Montreal.

OSTRICH PLUMES
R. Parker & Co., Toronto.

OVENS, portable bake
Bedford Stove Co., Bedford. Que.
*Wm. & J. G. Greey, Toronto.

OVERALLS
Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS
Rosamond Woollen Co., Aimonte, Ont.

OVERHEAD RUNWAYS.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont

OXYGEN
*L'Air Liquide Society, Montreal, Que.

PACKING BOXES
Barchard & Co., Ltd., Toronto.

PACKING, engine:
Garlock Packing Co., Hamilton.

PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES
A. Muirhead Co.. Ltd., Toronto.

PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Brandram-Henderson, Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd.. Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal. Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada Ltd.. Montreal.

PAINTS, barn and bridge
Standard Paint and Varnish Co., Ltd.. Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island, Que.

PAPER, book
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, cover
Barber Paper & Coating Mills, Ltd Georgetown, Ont.

PAPER, envelope
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building
*The Riordon Pulp and Paper Co., Montreal. Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, carbon
*Peerless Carbon and Ribbon Mfg. Co., Ltd., Toronto.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, coated box board
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd.. Georgetown, Ont.

PAPER, enamelled blotting
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd.. Georgetown, Ont.

PAPER, genuine Canadian kraft, glazed and unglazed
*The New Brunswick Pulp and Paper Co., Ltd., Millerton, N.B.

PAPER, label
Barber Paper & Coating Mills, Ltd.. Georgetown, Ont.

PAPER, ledger
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall. Ont.

PAPER, wall
Stauntons, Ltd., Toronto.

PAPER, writing
The Toronto Paper Mfg Co., Cornwall. Ont.

PAPER, writing, high-grade
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER BOXES:
*Dominion Paper Box Co., Toronto.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Limited. Stratford. Ont.

*For Display Advertisement See Index, Page 215

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THE MEN LIKE THEM

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PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

PIANOS, player
*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions
The Otto Higel Co., Ltd. Toronto.

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PIPE COUPLINGS:
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PIPE COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

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Standard Clay Products, Ltd., St. Johns, Que.

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Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings
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*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

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John H. Hall & Sons, Limited Brantford. Ont.

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*Union Drawn Steel Co., Ltd., Hamilton, Ont.

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*Canada Machinery Corporation Galt.

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PLASTER, fireproofing
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER OF PARIS
*Albert Mfg. Co., Hillsborough, N.B.
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER, hard wall
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land
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PLUMBING SUPPLIES
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Hough Lithographing Co., Ltd., Toronto.

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*Northern Electric Co., Ltd., Montreal, Que.

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PRESSES, Filter
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic
William R. Perrin & Co., Ltd., Toronto.
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer
William R. Perrin & Co., Ltd., Toronto.

PRESS POWER:
*Canada Machinery Corporation. Galt.

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R. G. McLean, Toronto.

PRINTERS, catalogue:
R. G. McLean. Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING
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PRODUCE
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PROPRIETARY MEDICINES
Northrop & Lyman Co., Ltd., Toronto.

PROVISIONS
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*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

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*International Engineering Works, Ltd., Amherst, N.S.
Spramotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

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*Canadian Allis-Chalmers, Limited, Toronto.
*The Goldie & McCullough Co., Ltd., Galt.

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*M. Beatty & Sons, Ltd, Welland. Ont.
*Waterous Engine Works Co., Ltd., Brantford.

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*Waterous Engine Works Co., Ltd., Brantford.

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*Dennis Wire & Iron Works Co., London.

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*Canadian Allis-Chalmers, Ltd., Toronto. Ont.

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*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville.

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Caron Bros., Montreal, Que.

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*The Steel Co. of Canada, Ltd., Hamilton.

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Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
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Daly & Morin, Montreal, Que.

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*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.

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Standard Paint Co. of Canada, Ltd., Montreal, Que.

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*The Canadian Bridge Co., Ltd., Walkerville. Ont.
Dominion Bridge Co., Ltd., Montreal.

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Hamilton Cotton Co., Hamilton, Ont.

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The Miner Rubber Co., Ltd., Granby. Que.
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Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
of Canada. Ltd., Toronto.
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*The Goodyear Tire & Rubber Co., of Canada, Ltd., Toronto.

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*The Goodyear Tire & Rubber Co., of Canada, Ltd., Toronto.

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*Canadian Fairbanks-Morse Co., Ltd., Montreal.

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J. Eveleigh & Co., Ltd., Montreal, Que.

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*Canada Machinery Corporation. Galt.

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Shurly & Deitrich, Galt. Ont.

SAWS, band:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SAWS, circular mill:
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*For Display Advertisement See Index, Page 215



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Shurly & Deitrich, Galt, Ont.

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Shurly & Deitrich, Galt, Ont.

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*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, counter
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*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, for weighing
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*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

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*Wm. & J. G. Greey, Toronto.

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*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

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*Canadian Drawn Steel Co., Ltd., Hamilton.
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*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

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*Eureka Mineral Wool & Asbestos Co., Toronto.

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The Sherwin-Williams Co. of Canada, Ltd., Montreal.

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J. J. McLaughlin, Ltd., Toronto.

SOIL PIPE
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*The Canada Metal Co., Toronto.

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*American Can Co., Montreal, and Hamilton.

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Guelph Spring & Axle Co., Ltd., Guelph, Ont.

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Guelph Spring & Axle Co., Ltd., Guelph, Ont.

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*Purdy, Mansell. Ltd., Toronto.
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A. Muirhead Co., Ltd., Toronto.

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*Jenckes Machine Co., Sherbrooke.

STATIONERY, office
Harris Lithographing Co., Toronto.

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*Canada Machinery Corporation, Galt.

STEAM PIPE and BOILER COVERINGS, asbestos:
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*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

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*M. Beatty & Sons, Ltd., Welland, Ont.

STEAM SPECIALTIES:
*Sheldons, Ltd., Galt.

STEAM TRAPS
*Canadian Sirocco Co., Windsor, Ont.

STEEL:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
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*Canadian Steel Foundries, Ltd., Montreal, Que.

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*Dennis Wire & Iron Works. Co., London.
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STEEL SHELVING:
*Dennis Wire & Iron Works. Co., London.

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Central Press Agency, Toronto.

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W. Doherty Piano & Organ Co., Ltd., Clinton, Ont.
*Otterville Mfg. Co., Ltd., Otterville, Ont.

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The Corinthian Stone Co., Guelph, Ont.

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Tudhope-Anderson Co., Ltd., Orillia. Ont.
Bedford Stove Co., Bedford, Que.

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Sheet Metal Products Co. of Canada, Ltd., Toronto.

STOVE LININGS
Standard Clay Products, Ltd., St. Johns, Que.

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Bedford Stove Co., Bedford, Que.
Gurney Foundry Co., Ltd., Toronto.
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont.

STRETCHERS, lace curtain
*Otterville Mfg. Co., Ltd., Otter-

STRUCTURAL STEEL
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*National Bridge Company of Canada, Ltd., Montreal, Que.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto. Ltd., Toronto.

SURFACERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SWING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

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*Canadian General Electric Co., Ltd., Toronto.
*The Canadian Independent Telephone Co., Ltd., Toronto.
*The Northern Electric & Mfg. Co., Ltd., Montreal.

SWITCHES, railway
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS
*Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SYSTEMS, OFFICE
*Autographic Register Co., of Canada, Montreal.

TABLES, billiard
Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.
Samuel May & Co., Toronto.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton, Ont.

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*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*E. Leonard & Sons, London, Ont.
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*International Engineering Works, Ltd, Amherst, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.

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Pratt and Whitney Co. of Canada. Dundas. Ont.
*Butterfield & Co., Rock Island, P.Q.

TAP WRENCHES
*Butterfield & Co., Rock Island, P.Q.

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The Lufkin Rule Co., of Canada, Ltd., Windsor, Ont.

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The Moulton Mfg. Co., 236 Craig St. E., Montreal.

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Canadian Independent Telephone Co., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

TELEPHONE APPARATUS
*The Canadian Independent Telephone Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

*For Display Advertisement See Index, Page 215



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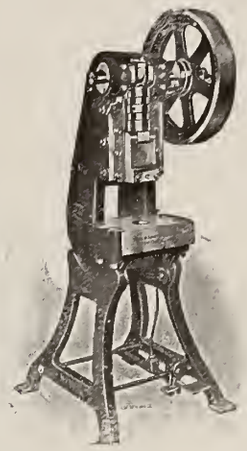
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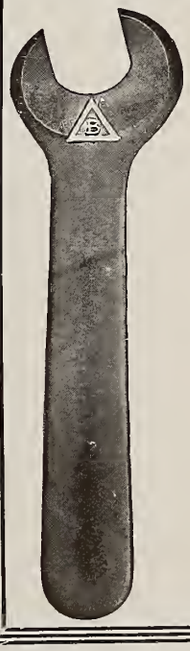
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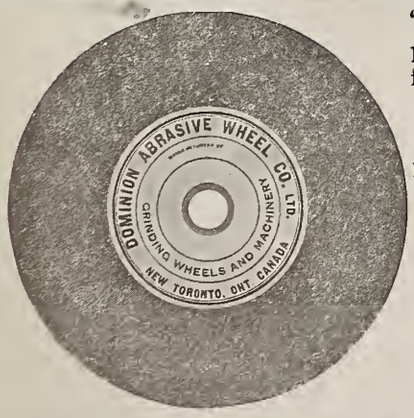
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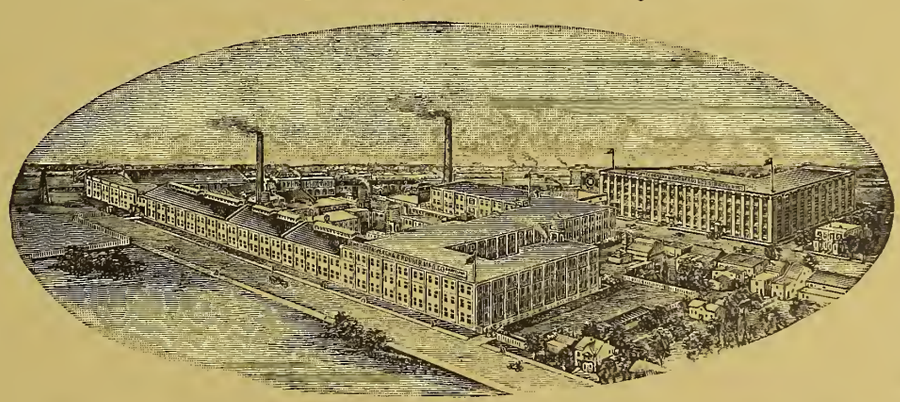
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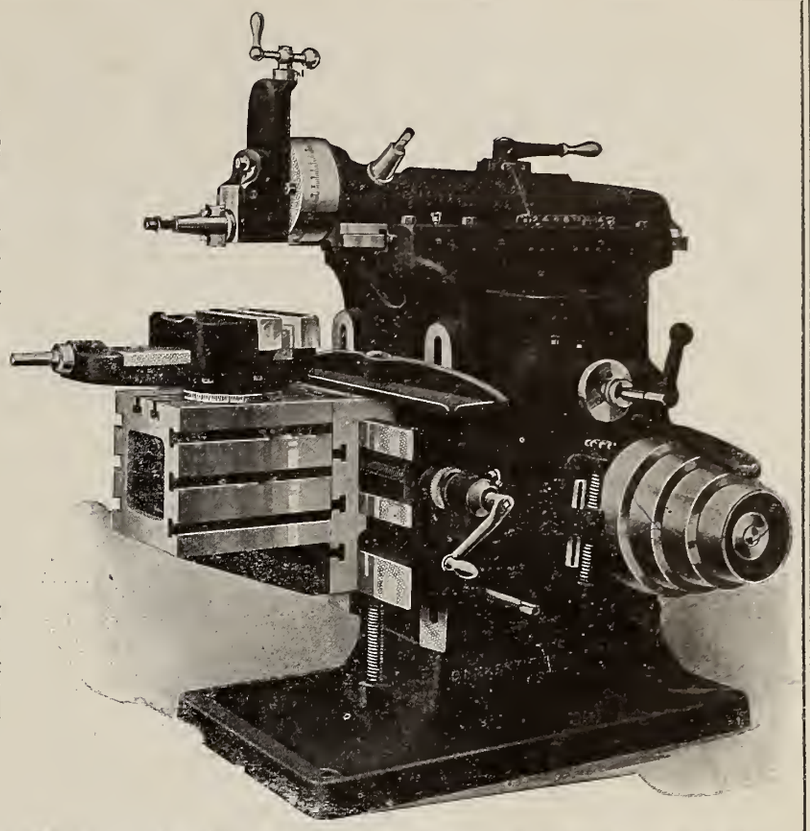
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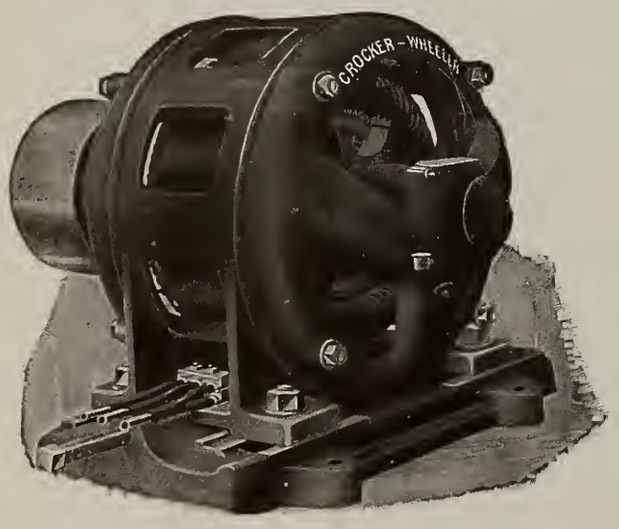
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THE DESIGN OF

CROCKER-WHEELER INDUCTION MOTORS

INCLUDES:

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features; Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works: St. Catharines

District Offices: Montreal, Toronto, Vancouver

THE MOST FOR THE MONEY MEDIUM

"AFTER all, what any advertiser buys is the chance to interest so many thousands of people, and he ought not to let anything interfere with his serious consideration of the question: How many thousand chances does this medium afford me, and is the price right?"—PRINTER'S INK, New York.

In the Street Cars of Canada you get 50,000 chances for every Dollar you pay for space. Figure out your chances in any other medium and then write us before all the space is gone.

Any of our offices will respond promptly to a request for information.

THE CANADIAN STREET CAR ADVERTISING COMPANY, LIMITED

Montreal :: :: Toronto :: :: Winnipeg



New Montreal Offices and Warehouses of Canadian Fairbanks-Morse Co., Limited
Designed and Constructed Under Our Supervision.

"Made-in-Canada"
Engineering Service

We are the oldest Industrial Engineering Organization doing business in Canada. Our business is entirely confined to Canada.

Our staff is complete. It includes Architects, Mill and Structural Engineers, Civil, Mechanical and Electrical Engineers.

No project is too large for us to undertake.

It will be to your profit to consult us when you are considering the erection of a new plant or the extension of your present one.

T. PRINGLE & SON, Limited
INDUSTRIAL ENGINEERS AND ARCHITECTS

420 Coristine Bldg., Montreal 509 Continental Life Bldg., Toronto

Type F H Condulets

Control Heating Devices & Permit Grouping of Plug Receptacle, Switch and Pilot Light, all in One Conduit Fitting

Easy to install, handy to operate, of good appearance



Type FH Condulet Showing Surface Plug Receptacle, Double Push Button Switch, Cover DS8, Receptacle C337 and Incandescent Lamp Mounted.



Type FH Condulet as sold

FOR sizes of Condulet and for complete lists of Covers and Fittings that can be used with it, see Condulet Catalog No. 1000.

Condulet Catalog No. 1000 will be mailed FREE upon request to any address.

"Study the wonders of Condulets."



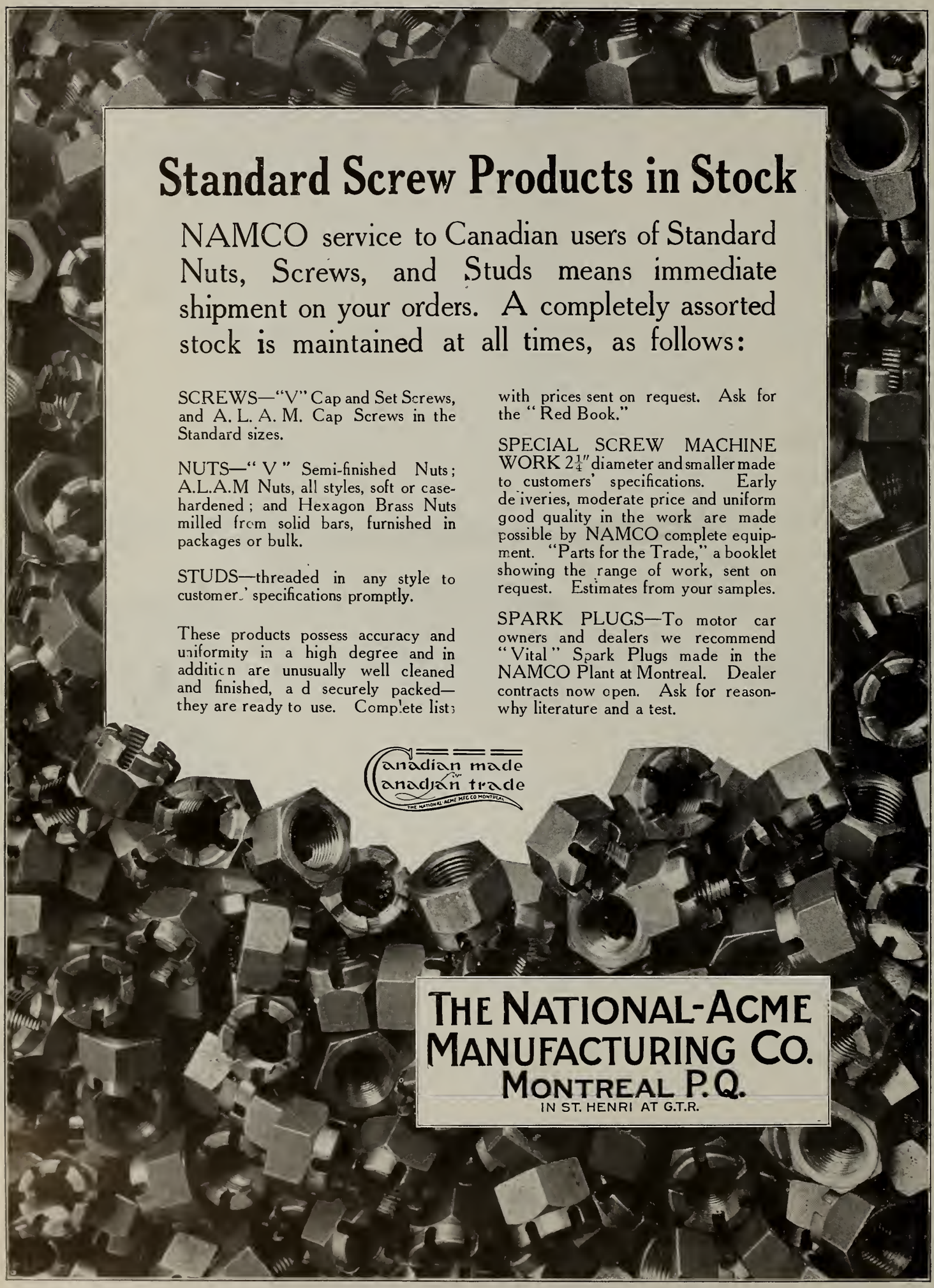
Type FH Condulet Showing Snap Switch, Flush Plug Receptacle Cover DS10, Receptacle C337 and Incandescent Lamp Mounted.

ORDER FROM YOUR JOBBER. IF HE DOES NOT STOCK THEM, WRITE US.

CROUSE-HINDS CO. OF CANADA, LIMITED

Main Office and Works:

TORONTO, ONTARIO, CANADA



Standard Screw Products in Stock

NAMCO service to Canadian users of Standard Nuts, Screws, and Studs means immediate shipment on your orders. A completely assorted stock is maintained at all times, as follows:

SCREWS—"V" Cap and Set Screws, and A. L. A. M. Cap Screws in the Standard sizes.

NUTS—"V" Semi-finished Nuts; A.L.A.M Nuts, all styles, soft or case-hardened; and Hexagon Brass Nuts milled from solid bars, furnished in packages or bulk.

STUDS—threaded in any style to customers' specifications promptly.

These products possess accuracy and uniformity in a high degree and in addition are unusually well cleaned and finished, and securely packed—they are ready to use. Complete lists with prices sent on request. Ask for the "Red Book."

SPECIAL SCREW MACHINE WORK $2\frac{1}{4}$" diameter and smaller made to customers' specifications. Early deliveries, moderate price and uniform good quality in the work are made possible by NAMCO complete equipment. "Parts for the Trade," a booklet showing the range of work, sent on request. Estimates from your samples.

SPARK PLUGS—To motor car owners and dealers we recommend "Vital" Spark Plugs made in the NAMCO Plant at Montreal. Dealer contracts now open. Ask for reason-why literature and a test.

Canadian made
Canadian trade
THE NATIONAL ACME MFG CO MONTREAL

THE NATIONAL-ACME MANUFACTURING CO.
MONTREAL P.Q.
IN ST. HENRI AT G.T.R.

PROTECT VALUABLE PAPERS

HERE'S a strong box of superior sheet steel, well made, of a good design and substantial, attractive finish. All corners and edges are rounded, and lid is secured by two hinges and a combination lock. Choice of interior arrangements. The price is low, and we would be glad to make one exactly as you want it.

THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON
CANADA



Last year Canada bought more than

A MILLION DOLLARS WORTH

of foreign-made goods per day

If those orders had been placed at home, every man in Canada would now be working to make those goods.

You Would be Busy

**"Keep the dollar in Canada,"
But keep it in circulation.**

Are you doing your part?

Ask your Jobber for WILT DRILLS.



Made in Canada by

**THE WILT TWIST DRILL CO. OF CANADA
LIMITED**
WALKERVILLE - - ONTARIO



BERRY QUALITY
In *Your* Varnish Shop

If you use Varnish in quantities large or small you owe it to yourself to get the best results your expenditures will buy.

There are many ways to economize in the use of varnish without sacrificing results—indeed, many times cost can be cut and results improved at the same time.

Ask the Berry Salesman

Ask the next Berry Brothers' representative that calls on you to look over some of the work your varnish shop turns out. Ask him if you are getting the kind and quality of a job you should for the money you spend. Ask him how you can improve that quality without raising your finishing costs.

He is a Varnish Expert, and has at his command a great fund of knowledge on the use, the service and the quality of varnishes for every known varnish need.

Apply this knowledge to your varnish shop by asking the Berry Brothers' salesman, or by writing direct.

BERRY BROTHERS
(INCORPORATED)
World's Largest Varnish Makers
Established 1858 Walkerville, Ont.

What about your Printing?

IF it worries you—why not shift the worry to us? We have a *worry department*—that will write copy—prepare designs—make cuts and show you the whole thing in a finished form—for your approval.

This service covers every piece of printing you may desire—catalogues—calendars—display hangers—booklets and such.

Are your Tags satisfactory?

WE'RE Tag headquarters for Canada. It's Tag Day—all the time with us—and—if your present tags are not just as you think they ought to be—send to us for samples.

Seven grades to choose from—suitable for every possible shipping or shop demand.

Factory Tags—Work Tags—String Tags and Gummed Labels are our specialties.

Southam Press Limited

Montreal · Toronto

THE HEATING SEASON IS UPON YOU

Complete Sirocco Heating Apparatus was produced and shipped from Windsor in three days for the factory of

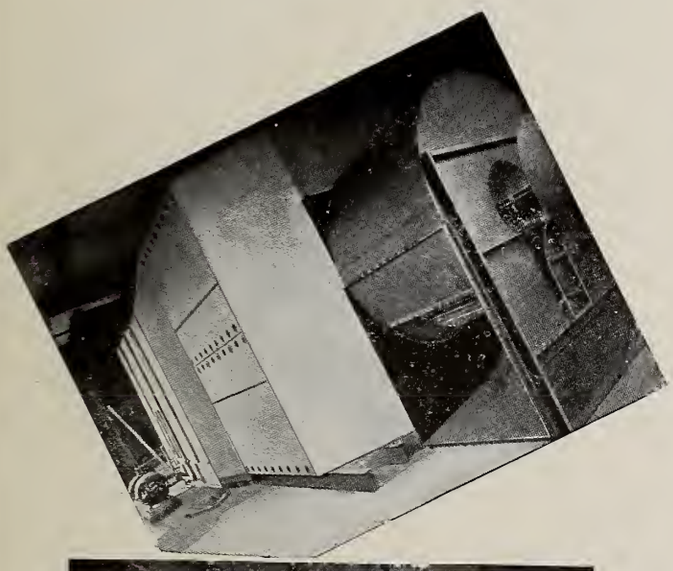
H. J. Heinz Co.
Leamington, Ontario

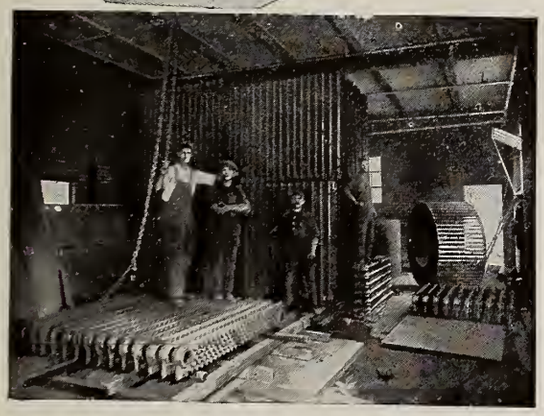
Send an inquiry to the Sirocco Engineering organization and get action right away.

DON'T delay further in contracting for that Heating System.

Without an effective system installed and ready to operate some ***cold*** and ***inefficient*** days will result.

Uncomfortable atmospheric conditions in an industrial plant impair production.





Entire heating apparatus centrally located and quickly assembled.

HOT "Sirocco" TRADE MARK BLAST HEATING SYSTEM

can be ***installed in less time*** than any adequated direct radiation apparatus and usually ***at a lower cost.***

Positive heat distribution from a centralized plant, backed by a ***positive*** guarantee of sufficiency—and the ***positive*** satisfaction of many large Canadian users (names upon request).

We are ready ***now*** to figure an efficient heating and ventilating system for you.

Send in blue prints and details to Home Office or nearest Sales Engineering Office.

CANADIAN Sirocco COMPANY LIMITED
WINDSOR. ONTARIO.

SALES ENGINEERING OFFICES.

S. S. CLARKE
605 2nd Street, Calgary

C. T. MORSE
43 Victoria Street, Toronto

SALES ENGINEERING OFFICES.

A. M. NICHOL
301 McGill Bldg., Montreal

W. P. EDDY
301 Tribune Bldg., Winnipeg

Russell Cars Guarantee



Quality Service AND Value

For every dollar you *invest* in a RUSSELL, you get a dollar of *tangible* value. $1,000 duty cannot add one cent of worth. You get *more*. You *pay less*. You help develop a Canadian industry. You increase Canada's prosperity. The production of Russell cars gives employment to 1,500 men. Requires $2,000,000 worth of material yearly. Distributes over $1,000,000 in wages to Canadian mechanics.

More Beautiful

Latest European stream-line bodies. New domed fenders. Concealed door-hinges. Clean running-boards. Double head-lights. Lasting lustrous finish. Spare tires at rear.

Full Equipment.—Highest quality top. Built-in, rain-vision, ventilating windshield. Demountable rims. Spare rim. Warner speedometer. Clock Electric horn, etc.

More Comfortable

Perfectly-balanced chasses. Long three-quarter-elliptic rear springs. Ample wheel-base. Big wheels. New proven two-unit electric starting and lighting system. New instrument board (complete control at finger tips). Left side drive. Centre control. Quick acting Collins side-curtains, opening with doors, and adjustable from seats.

More Efficient

Latest-type, long-stroke, smooth-running, high-efficiency engines. More power—less weight. Saving of fuel, oil and tires. Newest type ignition. Chrome nickle-steel gears and shafts. Cleverly designed chasses. Light, strong, heat-treated steels. Full-floating rear axle. Worm bevel gears. Double dust-proof brakes. Very low operative cost per mile.

Five reasons why YOU should drive a Russell "Made in Canada" Car:

1st: The highest-quality car—at the lowest price.
2nd: Built of finest materials—by expert workmanship. Fully guaranteed and backed by service stations from coast to coast.
3rd: Made in Canada—by Canadian workmen—in a Canadian-owned-and-operated plant.
4th: Most comfortable—easiest-riding—smoothiest-running car built.
5th: A vital unit in Canadian industry—whose success helps to build up Canadian prosperity—which in turn helps YOU.

Ride in a RUSSELL today. Performance proves its worth.

Agency applications invited in open territory. *"6-30"--$1750 "4-32"--$2650 "6-48"--$4500* *Catalogue and full descriptive matter on request.*

RUSSELL MOTOR CAR CO., Limited

WORKS AND EXECUTIVE OFFICES: WEST TORONTO
Branches: Toronto, Hamilton, Montreal, Winnipeg, Calgary, Vancouver



Northern Electric Inter-phones

—Have an important place in the business equipment of the "live wire" executive. They place

Every Department Within Arm's Reach

Pushing a button gets the ear of the man to be instructed or questioned—and gets it quickly. Interphones work automatically—no operator is necessary.
Let us send a man to show you how Inter-phones will help speed up your business.

Northern Electric Company
LIMITED
Makers of the Nation's Telephones

Montreal Halifax Toronto Winnipeg
Regina Calgary Edmonton Vancouver Victoria

Write to us for catalogue and further information

HOPE STEEL SASH



HOPE STEEL SASH is adaptable to every type of Industrial Building. Its great strength, economy and permanence fully meet the requirements of any architect or builder for this class of work.
The use of HOPE SASH means not only economy, but by the admission of more daylight and better ventilation it increases efficiency and means larger output for the manufacturer. HOPE SASH requires no upkeep and the first cost is practically the only cost. The fireproof qualities of HOPE SASH reduce insurance rates, and its durability is evidenced in structures in which it has been in use for a great number of years.

HENRY HOPE & SONS OF CANADA, LIMITED

43-45 KING STREET WEST, TORONTO

AGENTS:

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W. N. O'Neill & Co., Vancouver, B.C.
Gandy & Allison, St. John, N.B.
Wm. W. Cary & Co., Calgary, Alta.
W. T. Grose & Co., Winnipeg
E. F. Stevens, Halifax
Lyons Fuel Co., Steelton, Ont.
Peart Bros., Regina
Walker & Barnes, Edmonton, Alta.
David McGill, Montreal

We Are Ready for War

Can supply every Canadian Manufacturer and Jobber with their entire requirements of Steel and Brass Compression GREASE CUPS, Plain, Ratchet or Leather Washer, Types any finish desire d. Also al styles of Oil Hole Covers.

A NEW ONE



Hinge Lid Pressed Brass Oil Cup

With Syphon Feed. if desired. No order too large to ship from stock. Anything special you have been importing we will gladly make to your order. If your Jobber can't supply you with WINKLEY Cups write us for prices and Catalogue.

CANADIAN WINKLEY CO., LTD.
WINDSOR, ONTARIO

ASBESTOS

WE CARRY THE LARGEST COMPLETE STOCK IN CANADA

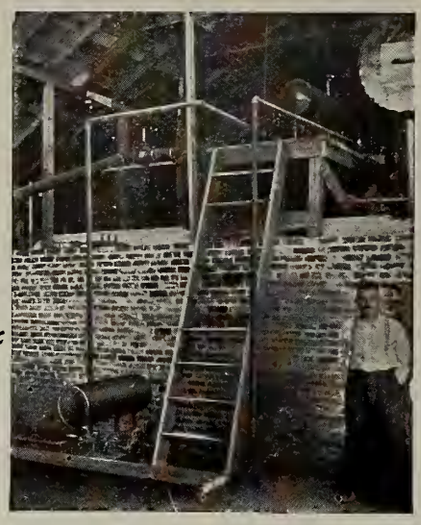
- ASBESTOS SHINGLES
- ASBESTOS LUMBER
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- ASBESTOS PIPE COVERING
- ASBESTOS CEMENT
- ASBESTOS CURTAINS

- CANASCO RUBBER ROOFING 1, 2 AND 3 PLY
- COTTON WASTE, WHITE AND COLORED, AND WOOL WASTE
- OAKUM, PLUMBERS AND NAVY
- BEAVER BOARD
- RAILWAY AND ENGINEERS' SUPPLIES

WE EMPLOY A LARGE STAFF OF EXPERIENCED WORKMEN AND UNDERTAKE THE COVERING OF STEAM PLANTS AND COLD STORAGE ANYWHERE IN CANADA.

CANADIAN ASBESTOS COMPANY

42 TO 48 YOUVILLE SQUARE — MONTREAL — MAIN 332 AND 611



A Typical Morehead Installation.

Quick Action with the "Morehead"

This is the Speed Age! Everybody's in a rush — on the street — in the office — in the factory. Action—Action—everywhere. Nearly every piece of machinery in your power plant is designed for quicker results. And so it is with the

Morehead

Back to Boiler SYSTEM

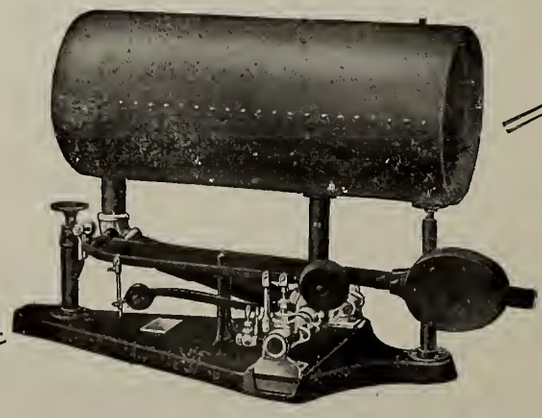
for the Morehead System *is* "quick-acting." No sooner has condensation formed in the steam apparatus than it is returned immediately to the boiler as feed water—at a temperature up to 330 degrees F.—and on 90 per cent. less steam than with a pump.

Our Engineers will show some speed in solving your steam problems. Let them. Write now. It pays.

Canadian Morehead Mfg. Co

Woodstock, Ont.

Get Quick Action—write today.



242

DO PEOPLE KNOW?

SUPPOSE you were a merchant operating a store on the same street with many competing shops.

Suppose half of those shops were to close their doors. Suppose the rest were in disfavor with their customers.

You would consider yourself in a very advantageous position, would you not ?

You *are* in just that position.

The war has stopped most of our imports from Europe. Public sentiment is in favor of goods "Made in Canada."

You *have* the *only* store on the street.

The public is demanding goods "Made in Canada." The "Made-in-Canada" advertising (handled by us) and the tremendous support accorded it by the newspapers is exerting a wonderful influence on the buying public.

But—does the public *know* that *your* goods are "Made in Canada ?" Does the great mass of the people know anything about them whatever, their merits, their cost, where to get them, how to know them ?

You *have* the only store on the street but you must tell the people it is there—through advertising.

In consider ig the service of any advertising agency its value must be judged not *alone* on that part of its work which appears to the public, but also on that which goes on underneath.

An Atlantic liner is vi ualized by the part of its hull that shows above the water-line—the rigging, smokestacks, and so forth—but, you know, a liner would never reach its port except for the engines, boilers, propellers and rudder underneath the water-line which, taken with the rest of the ship, produce an efficient carrier.

So it is in the careful planning of the method of attack, of the work on dealer, jobber, etc. and the solution of merchandising problems, as well as in the actual advertisements used, that an advertising agency makes, or does not make, a success of the advertising of its clients.

Unless advertising results in the actual sale of the goods, over the dealer's counter, advertising is a failure, no matter how clever or spectacular it may be.

Our experience, covering over 25 years, in advertising nearly every sort of product, has taught us what makes for success in advertising.

A. McKIM LIMITED

ADVERTISING AGENCY

MONTREAL	TORONTO	WINNIPEG	LONDON, ENG.
Lake of the Woods Bldg.	103 Bay St.	Union Bank Bldg.	465 Norfolk St. W.C.

GET BRIGHTER LIGHT Without Increased Cost

USE

Northern Light

MAZDA LAMPS



BUY THEM BY THE BOX

Northern Light Mazda Lamps give three times the light of the old-fashioned carbon lamps and consume no more current. Use them in your factory. Brighten up the dark places. Increase efficiency without adding to expenses. For your own convenience buy Northern Lights by the box.

Northern Electric Company
LIMITED

MONTREAL TORONTO HALIFAX
WINNIPEG REGINA CALGARY
EDMONTON VANCOUVER VICTORIA

NICHOLSON MADE

PATRIOTISM

Patriotism can be practised by giving employment to the workers who must remain at home to keep alive Canadian industry

When you buy Canadian-made goods you help Canada.

When you buy foreign-made goods in preference to Canadian manufactures, you help foreign labor. And you increase the number of Canadians who may later need public help.

NICHOLSON-MADE-FILES

BRANDS:
KEARNEY & FOOT GREAT WESTERN
AMERICAN ARCADE GLOBE

are made in Canada — by Canadian Mechanics — for Canadian Use.

Big stocks are in our warehouse and on dealers' shelves everywhere for immediate use.

50,000,000 per year are now required to meet the demand.

Use Nicholson-Made-Files — the only Canadian-made Files

Nicholson File Co., Port Hope, Ont.

Your Men will Appreciate

Reece's Screw Plate

because, although fully adjustable it has all the advantages of a solid die. It is so made that cutting cross threads is an impossibility. Dies can be reversed in the collet for use in a lathe or other machine.

Invest in just one sample and test it out for yourselves.

Butterfield & Co., Inc.

Rock Island, P.Q. **Derby Line, Vt.**



A small tool that is big in results.



There are no openings in buildings that cannot be closed properly by Ormsby Underwriters Fire Doors.

Studying out satisfactory doors for awkward openings has made us proficient in that branch of work. Abattoirs have many such problems to be solved on account of their overhead tracks. Practically all abattoirs in this country are equipped with the Ormsby Underwriters Fire Doors, and every one has given entire satisfaction.

ORMSBY Underwriters FIRE DOORS

This type of door, the Tin Armored, is the accepted standard of protection from fire. Built up of layers of kiln dried lumber and completely covered with the best grade of tin, they are at once rigid and fire proof under the fiercest heat. They offer a resistance to fire that would buckle and twist doors made entirely of steel.

We will be pleased to send complete information to those interested.

The A. B. ORMSBY Co.
Limited, Toronto

Associated with the Metal Shingle and Siding Co., Limited

Factories at Montreal, Toronto, Preston, Winnipeg, Saskatoon, Regina, Calgary, Edmonton

AGENTS—

Vancouver, N. J. Dinnen & Company
Victoria " "
Winnipeg " "
Calgary, " "
Edmonton " "

Regina, McKenzie Hazel Supply Co.
Moose Jaw, General Builders' Supply Co.
Prince Albert, Bowman Supply Co.
Port Arthur and Fort William, Twin City Sand Co.

Quebec, J. A. Bernard.
Ottawa, Canadian Agency & Supply Co.
Halifax, Frank A. Gillis & Company.
St. John, J. C. Berrie.

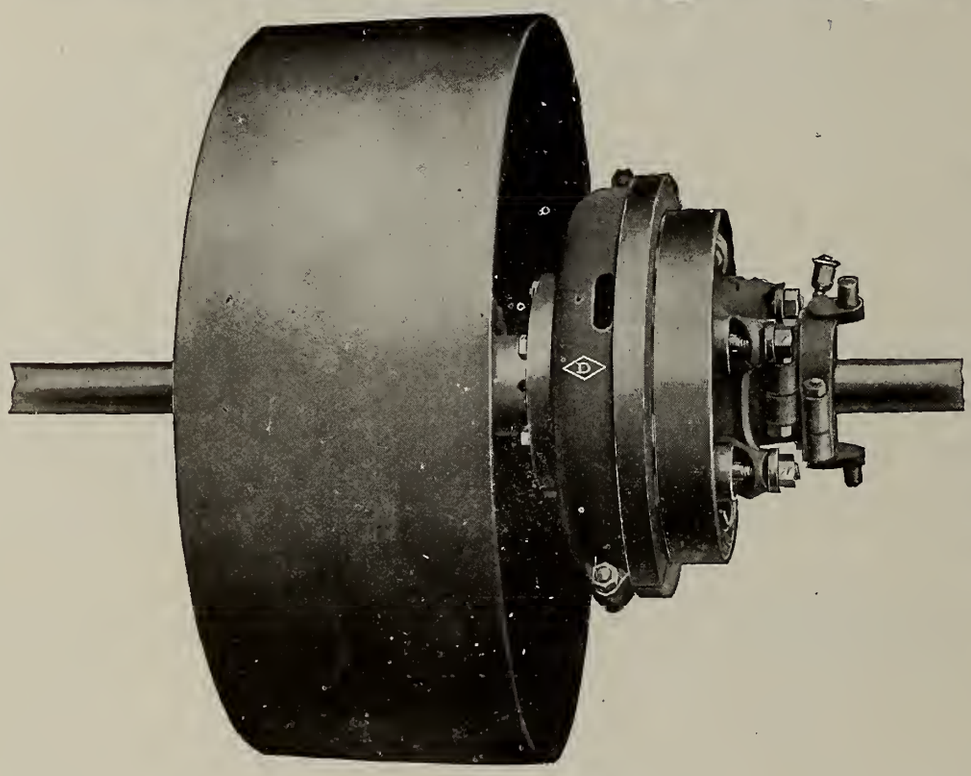
DODGE

Friction Clutch Pulleys

AND

Cut-Off Couplings

All Sizes Ready to Ship



Fitted With Iron Pulleys, Wood Pulleys, or Steel Pulleys

SIMPLE POSITIVE DURABLE

Save time, save power, all parts interchangeable

We are headquarters in Canada for Clutches. Send for Catalogue.

Dodge Manufacturing Co., Limited

TORONTO MONTREAL



L. 2060-21 | Suit 18-10½ Sizes 22-26 | M. 159-12 | M. 168-15 | O. 454-13½ Sizes 18-22

THE above illustration is from the catalogue recently built and produced by us for the Monarch Knitting Company, Dunnville, Ontario. It is probably the most pretentious piece of color work ever produced for any one line of goods anywhere.

Each group is posed from live models and is a direct photographic representation of the actual goods in their actual colors. For the thirty-two groups some forty odd models were used.

Outside of the fact that this catalogue places Canadian printing on the basis of the best American Houses, it demonstrates that some Canadian manufacturers—in spite of adverse business conditions—have not lost their nerve.

For Catalogue Information and Service consult with

SOUTHAM PRESS, LIMITED

CANADA'S LEADING PRINTING HOUSE

TORONTO - - MONTREAL

SUPPORT CANADIAN INDUSTRIES

USE THE BEST

"Red Seal" COATED R PAPER "Luxacoted"

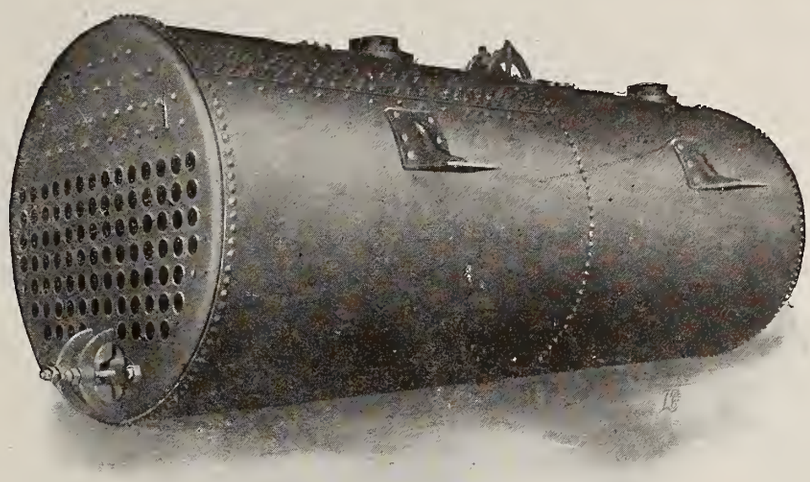
REGISTERED TRADE MARK

MADE IN CANADA BY

RITCHIE & RAMSAY LIMITED

TORONTO - CANADA

BOILERS



STANDARD RETURN TUBULAR BOILER

We make boilers of all kinds for any service.

We are also sole Canadian makers of Erie City Water Tube Boilers, Vertical and Horizontal.

The large number of pleased and satisfied owners of "INGLIS" Boilers is our best advertisement.

For (52) fifty-two years our boilers have been the standard. We have installations of our different types of boilers, which our representatives will be pleased to show to prospective purchasers. Write us for prices, etc.

The John Inglis Company, Limited

ENGINEERS AND BOILERMAKERS

14 Strachan Avenue Toronto, Canada

MONTREAL OFFICE: 509 Canadian Express Building

Goold, Shapley & Muir Co.

LIMITED

BRANTFORD : WINNIPEG : REGINA : CALGARY

MANUFACTURERS OF

GAS AND GASOLINE ENGINES

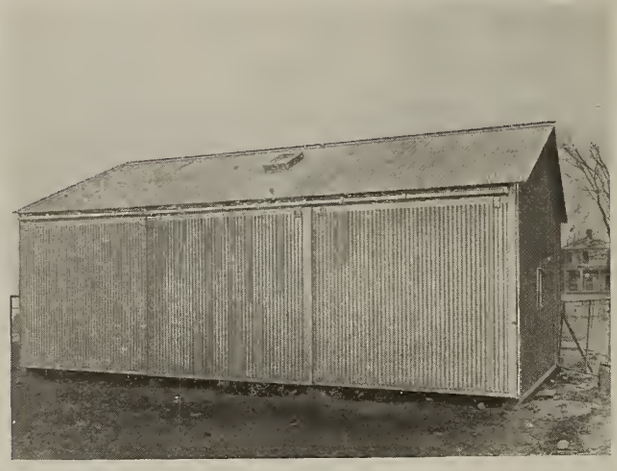


TANKS
AND
TOWERS
FOR
Sprinkler Systems
TOWN WATER SUPPLY
ETC., ETC

PUMPS
CONCRETE MIXERS
HOISTS, Etc.

Write, if interested

MANUFACTURERS' STORAGE BUILDINGS



Heavy steel frame covered with Acorn quality corrugated iron.

All cut and ready to put together at our factory. Two men can erect a building in a few hours' time.

If you need fireproof storage space, send for our booklet "Ready-made Buildings."

THE METAL SHINGLE & SIDING CO., Ltd.
PRESTON, ONTARIO

JULIUS COHEN & JOSEPHY

BRADFORD BERLIN TOURCOING BOSTON

FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. *Write for prices to*

H. V. ANDREWS, Canadian Representative **32 Church Street, Toronto, Canada**



Canadian Plant
Chicago Bridge & Iron Works
Bridgeburg, Ontario

ELEVATED STEEL TANKS AND STANDPIPES

For Municipal, Railroad and Factory Service

We also build Oil Tanks, Coaling Stations, Bridges, Turntables, Buildings and Structural Material. Write for illustrated Catalogue No. 25.

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NOTICE

To Manufacturers, Dealers and Users of Steam Boilers.

ALL boilers built in, or entering the Province of Ontario, and boilers exchanged or extensively repaired are subject to Government inspection as prescribed in the Steam Boiler Act.

All communications should be addressed to The Steam Boiler Branch, Department of Public Works, Parliament Buildings, Toronto.

HON. J. O. REAUME, Minister of Public Works.
D. M. MEDCALF, Chief Inspector of Steam Boilers.

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Owned by J. T. BURROWS, "The Mover," Brantford, Ont.

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will protect your shipment against water, damp, damage—and the goods will be removed by your customer in just as good condition as when packed. Wood has become so expensive that it is not economy to use it for packing cases. But even if H. & D. Corrugated Fibre Board Boxes were not cheaper, they would still be vastly superior for any package weighing less than 100 pounds. Although they cost less and are a great deal lighter, they are five times as strong and have greater carrying power. The cellular construction of the board makes the cases so resilient that they will stand most extraordinary rough handling and abuse.



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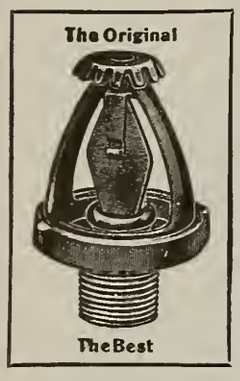
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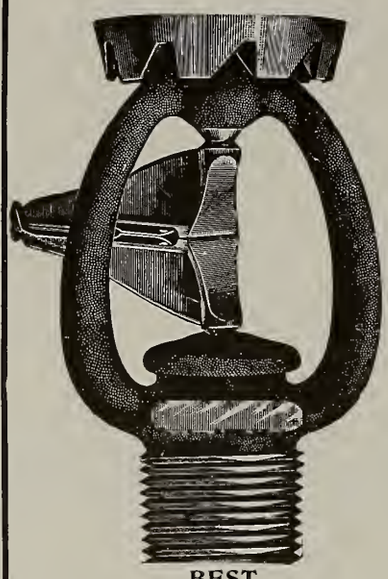


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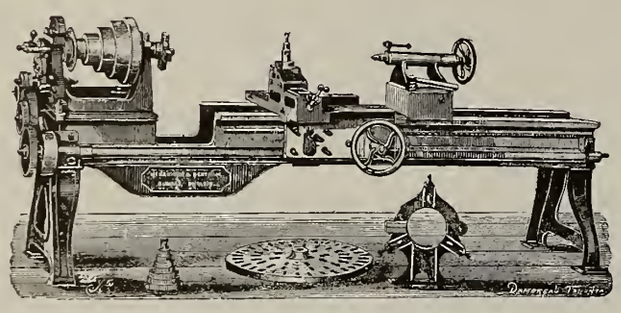
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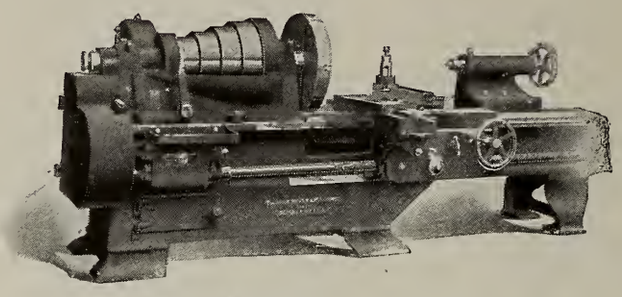
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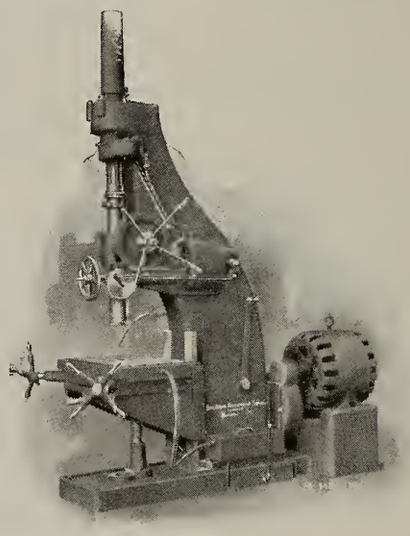
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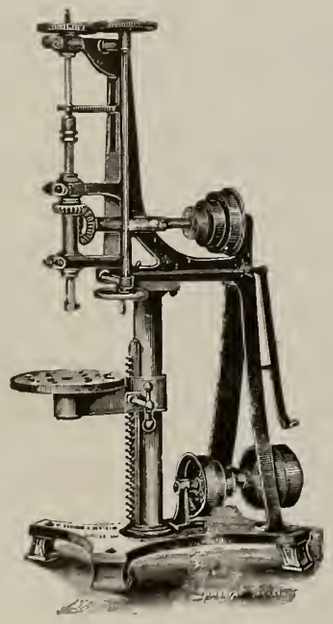
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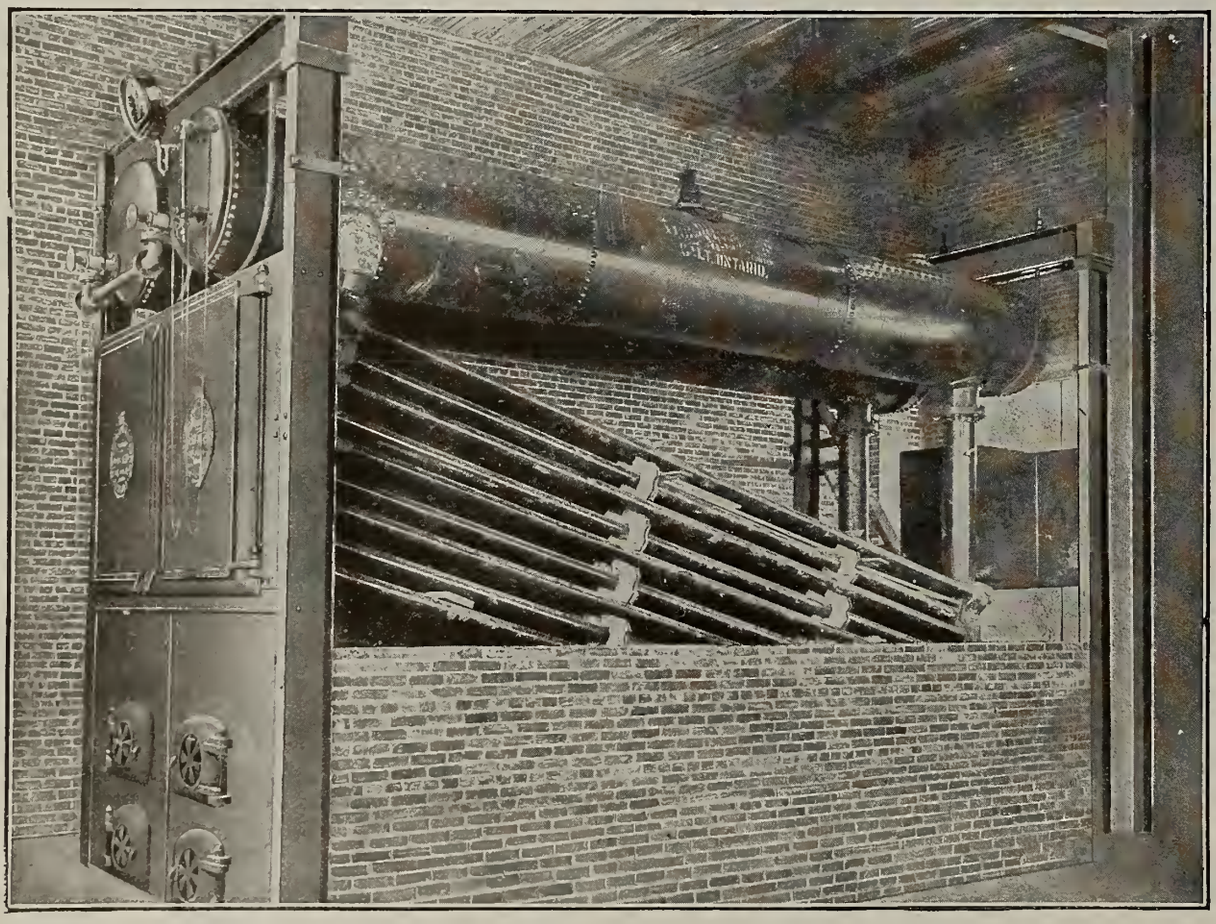


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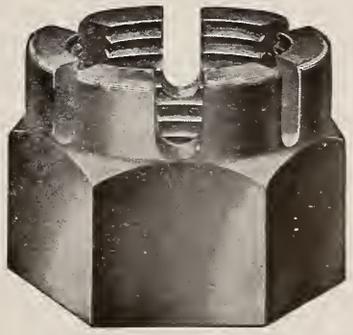
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HON. JAS. S. DUFF, Minister of Agriculture
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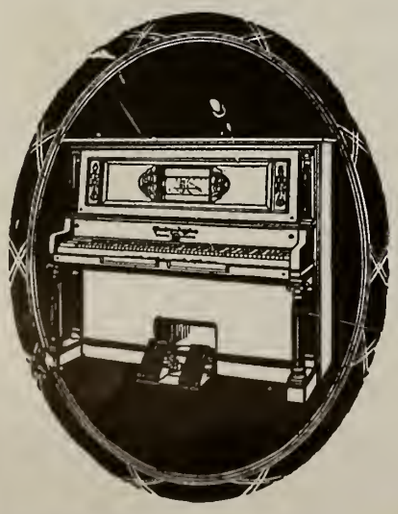
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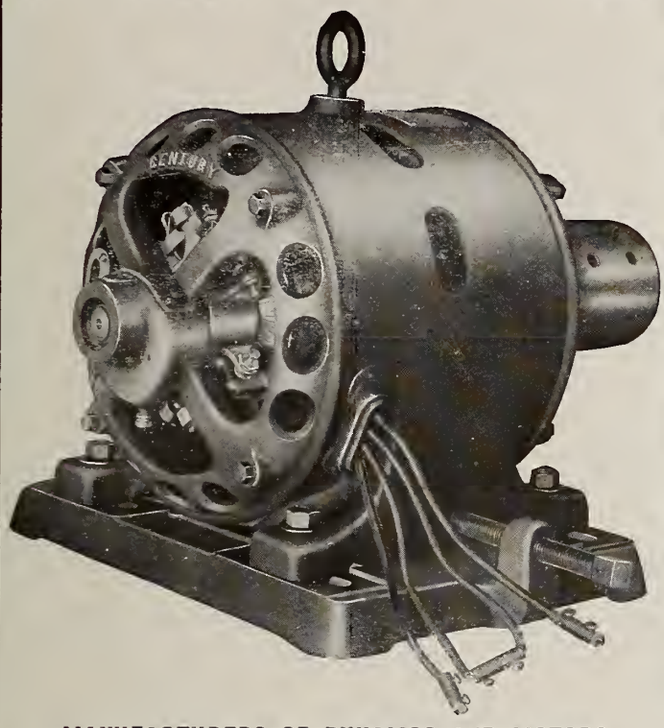
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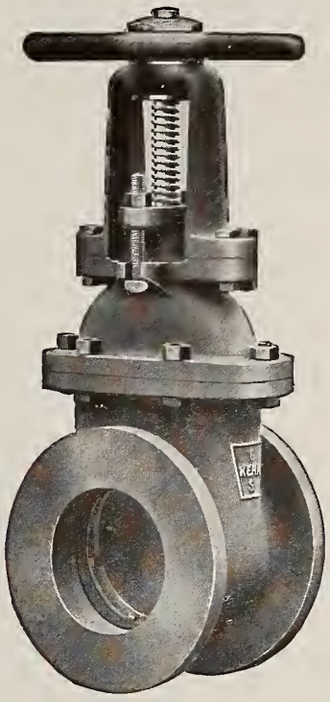
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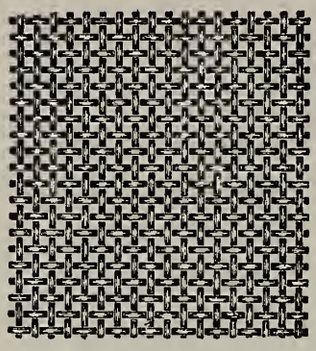
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Dey Cost Keeper for Getting Accurate Cost

We are the Original Manufacturers of All Time Recorders.

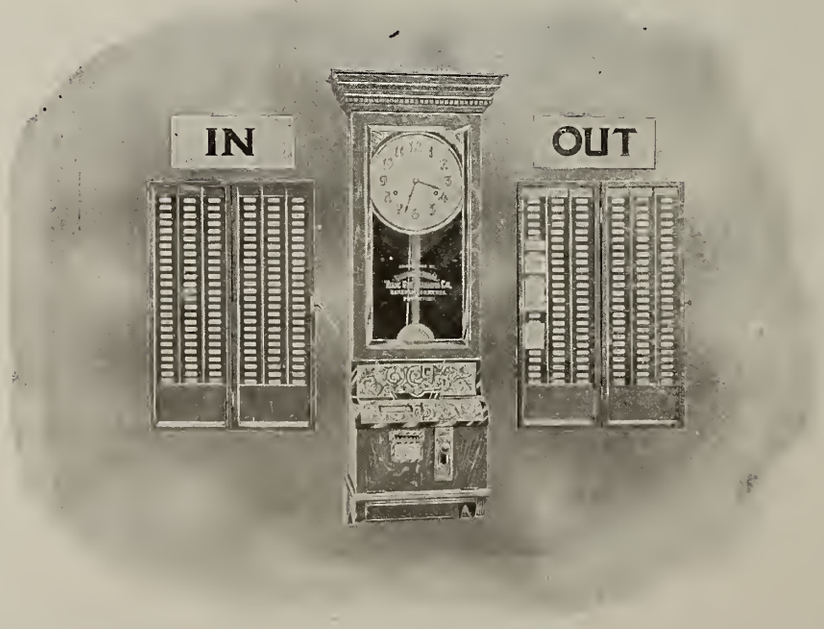
We Lead, Others Follow.



Autograph Clock



Well-Known Dey Dial Recorder.



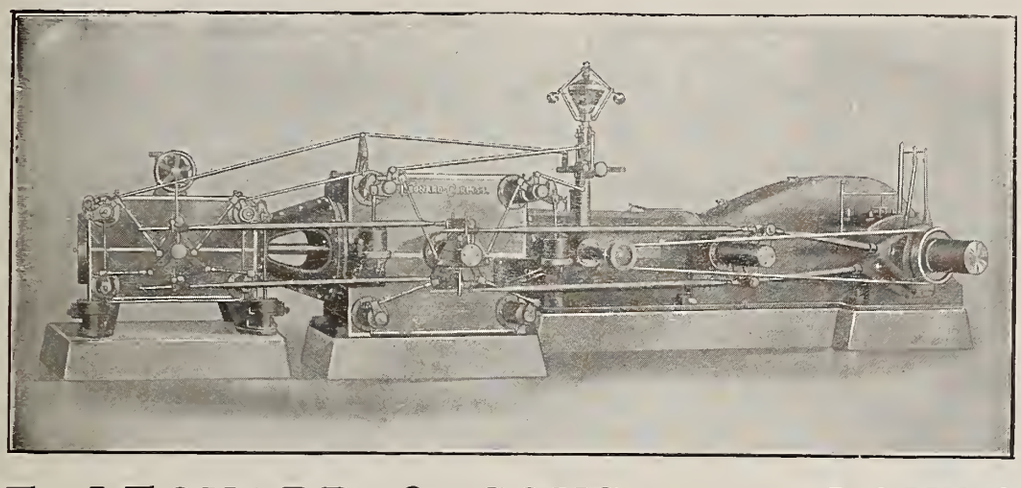
International Card Recorder

INTERNATIONAL TIME RECORDING COMPANY OF CANADA, LIMITED

21-23 Alice Street, Toronto, Canada - - - Offices in all Principal Cities in Canada

TANDEM COMPOUND HEAVY DUTY LEONARD-CORLISS ENGINES

We are the oldest manufacturers of Corliss Engines in Canada, and our long experience has resulted in the production of a first class engine in every particular, well adapted for all classes of heavy duty service, where high economy is a consideration. Made in units up to 1,500 Horse Power.



BOILERS

We have the most modern equipment for the manufacture of Boilers and are prepared to turn them out on short notice to comply with all Provincial Inspection Laws.

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WAREHOUSES AND AGENCIES AT

MONTREAL, ST. JOHN, N.B., CALGARY, WINNIPEG, VANCOUVER.

Nova Scotia Steel & Coal Co.

LIMITED

Head Office: New Glasgow, Nova Scotia

Steel Works - - - - TRENTON, N.S.

Iron Mines - - - - WABANA, NFLD.

Collieries and Blast Furnaces, SYDNEY MINES, N.S.

"OLD SYDNEY COAL"

Shipping Port, North Sydney

ADDRESS ALL CORRESPONDENCE TO HEAD OFFICE



Why Pay Freight on Wooden Boxes ?

MARTIN

Corrugated Shipping Cases

Are made from special fibre stock, and are constructed so as to protect the goods from damage or breakage. At the same time saves 75 p.c. of weight of wooden cases.

These boxes comply with the freight classification and are accepted at the same rate as goods packed in wooden boxes. Can be used for shipping by freight or express any goods in reasonable weight package.

Write for catalogue and sample. Give inside dimensions and weight of contents.

Martin Corrugated Paper & Box Co., Ltd.

Office and Factory - - 353 Pape Avenue, Toronto

MALLEABLE IRON CASTINGS

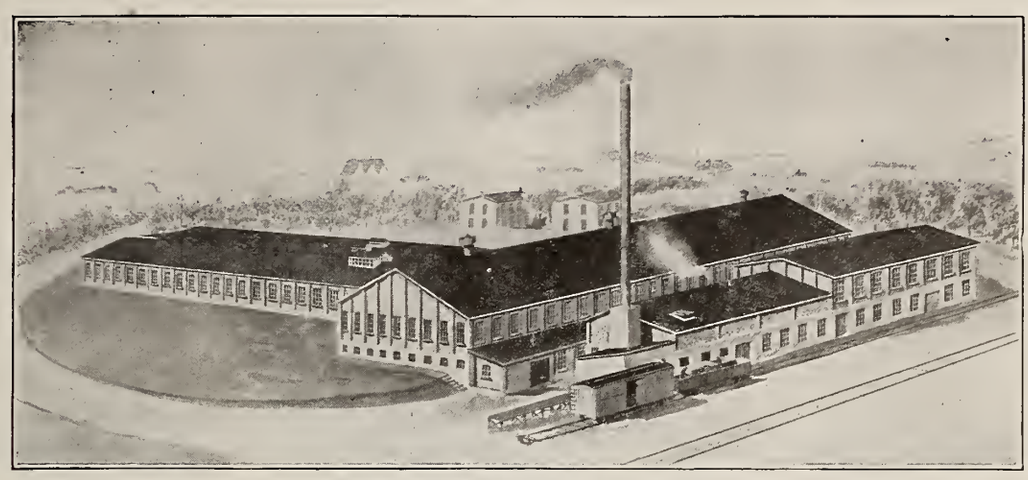
HIGH TENSILE STRENGTH

GALT MALLEABLE IRON CO.

LIMITED

GALT ∴ ONTARIO





Barber Coating Mills, Georgetown, Ont.

The Largest and Best Equipped Mill in Canada for the Coating of Paper.

"Maple Leaf" "Beaver" "C. A." Coated

Insist on these Brands being used in your Catalogue

PROVINCIAL PAPER MILLS CO., Limited

Toronto Office: Telephone Building Private Exchange Adelaide 1986

FIBRE, PAPER LUMBER

LARGE VARIETY BUILDING PAPERS

Can be shipped from stock on hand at Merritton.—Grey, Blue, White, Brown, also Hawkesbury Impervious Sheathing

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Now is the time to be Patriotic
Help the British Empire
Buy Paper "Made in Canada"

EARNSCLIFFE LINEN BOND

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Samples furnished on request

The Rolland Paper Co., Limited
MAKERS OF HIGH GRADE PAPERS

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MONTREAL

Mills at
ST. JEROME and
MONT ROLLAND

ROYAL RECORD

The Letter Paper of Big Business.

Will you let our "Service Department" assist you with samples and information on any point relative to Stationery.

THE HOWARD SMITH PAPER MILLS Limited

138 McGILL STREET
MONTREAL

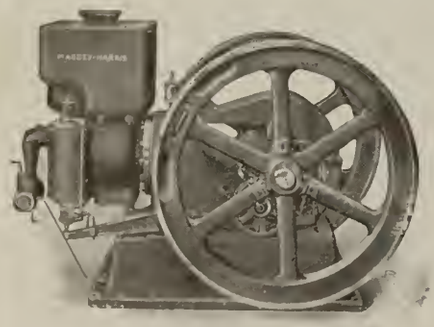
MILLS AT
BEAUHARNOIS, P.Q.

"MAKERS IN CANADA OF HIGH-GRADE PAPERS"

GASOLINE ENGINES MASSEY-HARRIS DIRECT-CONNECTED PUMPS

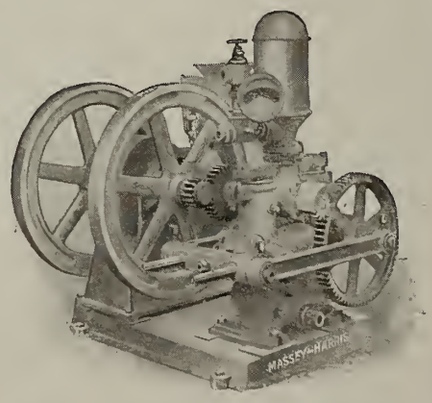
THESE Engines represent the very best type of Gasoline Engine construction. They have been developed to their high state of efficiency by those whose life work has been the designing and building of Gasoline Engines.

Their high efficiency, coupled with their economy of operation and durability, combine to make Massey-Harris Engines, without exception, the most reliable and satisfactory on the market to-day.



For the Contractor

Engines, Pumps, Hoists
Dump Wagons, Dump
Carts, Dump Boxes,
Teaming Gears, Lorries,
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ETC.



Stationary or Portable 1½ to 20 Horse Power. Maximum Power with Minimum Consumption of Gasoline.

MASSEY-HARRIS CO. LIMITED

HEAD OFFICES, TORONTO

Branches at: Montreal, Moncton, Winnipeg, Regina, Saskatoon Swift Current, Yorkton, Calgary, Edmonton

AGENCIES EVERYWHERE

Cylinder Pumps and Diaphragm Pumps, Stationary or Mounted on Truck — Reliable and Efficient.

THE GRASSELLI CHEMICAL CO.
LIMITED

HEAD OFFICE AND WORKS, HAMILTON, ONTARIO

SALES OFFICES AND WAREHOUSES:

TORONTO, ONT. - - - - 347 PAPE AVENUE
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HIGH GRADE HEAVY CHEMICALS

Sulphuric, Muriatic and Nitric Acids, and Aqua Ammonia, both Commercial and Chemically Pure; Mixed Acid, Acetic Acid, Glauber Salt, Salt Cake, Silicate of Soda, Caustic Soda, Soda Ash, Caustic Potash, Hypo-Sulphite of Soda, Bi-Sulphite of Soda, Sulphide of Soda, Calcined Magnesite, Chloride of Magnesium, etc., etc. Grasselli Arsenate of Lead and Lime Sulphur Solution.

We manufacture from the Log and Creosote under Pressure to any desired specification

CREOSOTED WOOD BLOCK PAVING CREOSOTED BRIDGE AND MINING TIMBERS, CREOSOTED FIR PILING

In our New Plant we have adopted the most Scientific and Modern Methods as regards the Treatment of Timber, and will be glad to furnish Quotations, guaranteeing Prompt and Satisfactory Delivery.

THE DOMINION CREOSOTING COMPANY, Limited, Vancouver, B.C.

SUCCESSORS TO THE DOMINION CARBOLINEUM WORKS, LIMITED

COTTON & WOOL WASTE

Made in Canada by

The Dominion Waste Mfg. Co. Limited, Toronto

BRANDS:

Cotton Polishing: Cream, White.

White Cotton Wiping: XXX Extra, X Grand, XLCR, X Empire, X Press.

Colored Cotton Wiping: Fancy, Lion, Standard, Popular, Keen.

Wool Packing: Arrow, Axle, Anvil, Anchor.

Washed Cotton Wipers: Select White, Light Colored, Dark Colored.

Packed in Compressed Bales
500, 200, 100, 50, 25, 10, 5 lbs.

No liquid dope or clay used in any of our brands—nothing but threads.

WASHED COTTON WIPERS

SOLE SELLING AGENTS

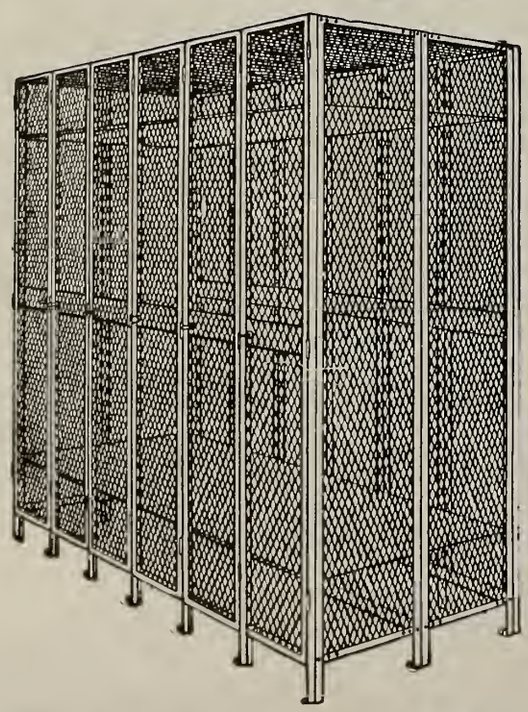
Scythes & Company Limited

Manufacturers and Jobbers

TORONTO
MONTREAL

Also headquarters for Cordage, Twines, Cotton Duck Oiled Clothing, Etc.

That Locker Question



MR. MANUFACTURER

That's the Question

We will help you to a decision
IT IS WAR TIME YOU KNOW
We want Your Orders
BE PATRIOTIC IN FACT
As well as in sentiment

TRADE IN CANADA

The Geo. B. Meadows Toronto Wire, Iron and Brass Works Co., Limited, TORONTO

THE NICHOLS CHEMICAL COMPANY, LIMITED

MANUFACTURING CHEMISTS

HEAD OFFICE: 222 ST. JAMES STREET, MONTREAL

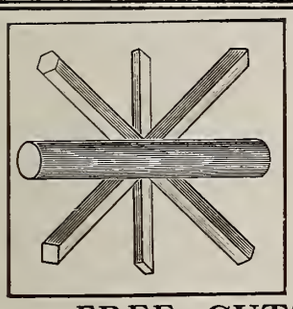
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WORKS: Capelton, Que., Sulphide, Ont., Barnet, B.C. WAREHOUSES: Montreal, Toronto

Sulphuric Acid	Sulphate Soda	Glauber's Salt	Bleaching Powder
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Agents for Baker & Adamson's Chemically Pure Acids and Chemicals

AGENTS FOR CANADIAN SALT CO.—"WINDSOR" BRAND CAUSTIC SODA & BLEACHING POWDER



COLD DRAWN, TURNED AND POLISHED STEEL

SHAFTING

ROUNDS, SQUARES, HEXAGONS AND FLATS

¼ in. to 6 in. Dia. ¼ in. to 2 in. ¼ in. to 2¼ in. up to 1½ in. 2½ in.

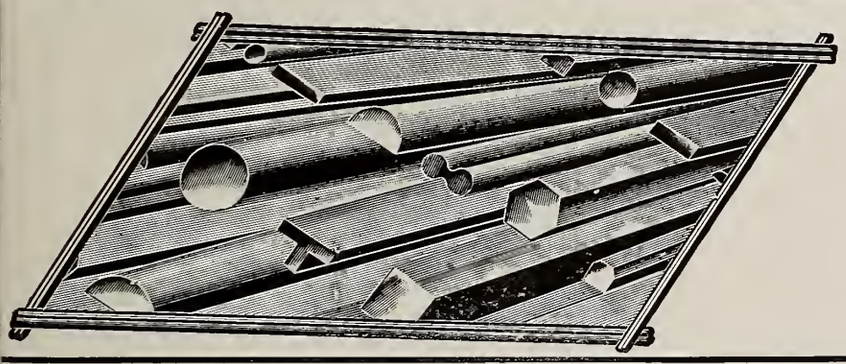
FREE CUTTING SCREW STOCK, PISTON AND PUMP RODS

The CANADIAN DRAWN STEEL CO., Limited

HAMILTON, ONTARIO

UNION DRAWN STEEL CO., Limited

HAMILTON, ONTARIO



MANUFACTURERS OF

Shafting

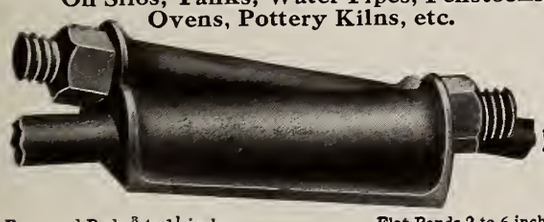
Rounds, Flats, Squares and Hexagons

LARGEST STOCK IN CANADA

Get prices before ordering elsewhere.

LUGS FOR BANDS

On Silos, Tanks, Water Pipes, Penstocks Ovens, Pottery Kilns, etc.



Ask for Price List

For round Rods ⅝ to 1½ inch Flat Bands 2 to 6 inches wide

Best Malleable Iron—Prompt Shipments.

OTTERVILLE MFG. CO., LIMITED

OTTERVILLE, ONT.

EXPORTERS OF

Reed Organs, Piano Stools, Music Cabinets.

Catalogue B.

The Goderich Organ Co. Limited

GODERICH, CANADA

Closet Seats, Flush Tanks, Medicine Cabinets,

Everything for the Bath Room.

Write for Catalogue C. and Price List.

YOU CAN INCREASE YOUR POWER WITHOUT INCREASING THE SIZE OF YOUR POWER PLANT

Your present line shafting is consuming from 15% to 60% of your power.

The Chapman Double Ball Bearing will save this waste and turn it into productive energy.

They will also reduce your oiling and attention to a minimum.

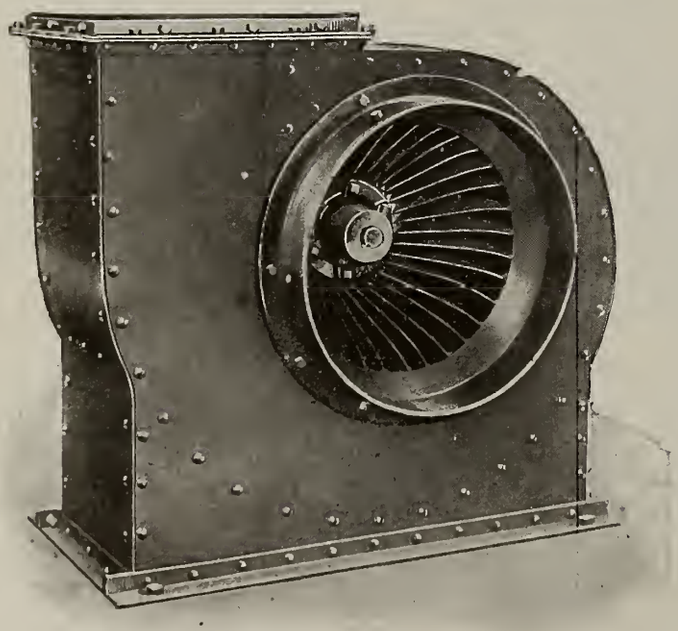
They fit any adjustable hanger and the change can be made with but little delay to you.



In use in over 2,000 Canadian Factories

The Chapman Double Ball Bearing Company
OF CANADA LIMITED

339-351 Sorauren Avenue ∴ ∴ Toronto, Canada



Keith Fans

For Heating and Ventilating

When it comes to a question of Heating and Ventilating the Factory, Church, School or Public Building, it is imperative that you should select the best and most approved system. The **"Keith" Fan** is specially distinguished for giving greater volume with less power than any other Fan made. Get our Keith Fan Catalogue No. 55 and judge for yourself.

SHELDONS LIMITED - GALT, ONTARIO

Toronto Office—609 KENT BUILDING

AGENTS

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Messrs. WALKER'S, LIMITED, 259-261 Stanley Street, Winnipeg, Man.
Messrs. GORMAN, CLANCEY & GRINDLEY, LIMITED, Calgary and Edmonton, Alta.
Messrs. ROBERT HAMILTON & CO., LIMITED, Bank of Ottawa Building, Vancouver, B.C.

EXPORT TRADE

Section of a folder showing how one Canadian Manufacturer is catering for it.



D. 2. GUARDARROPA

Un bello y cómodo guardarropa de dos divisiones. Hay en varios tamaños o se puede hacer de las dimensiones que se requieran. Construido en el sistema unitario. Se usan puertas de metal distendido donde se deseen facilidades para la inspectión del contenido



D. 35. GUARDARROPA

Es un guarda-ropas muy hermoso con "frente plano," y nuestro nuevo diseño de puerta. Se hace en tamaños regulares o especiales. Cada guarda-ropas tiene una tabla y dos ganchos con tres puntas. Un sustentor de paraguas y plato de gotear se suministran si se desea.

DENNISTEEL
LONDON - CANADA

:: VENTAJAS ::

Seguridad contra robo. Los objectos de cada persona están a salvo. Cada puerta tiene cerradura diferente.

Higiene. Los objetos de acero se mantiene limpios con facilidad. El acero, a diferencia de la madera, no absorbe humedad u olores. No se crian gérmenes.

Ocupan menos espacio. El menor espesor del acero para la misma resistencia hace nuestros armarios mucho más reducidos que los de madera.

Fácil armazón. Nuestros armarios se arman y desarman fácilmente, cuando sea menester.

Aumento. Construidos, como son, en el sistema unitario de piezas a un patrón, se les puede aumentar secciones según aumenten las necesidades.

Durabilidad. Con uso común y corriente, los armarios duran indefinidamente. Sólo se hace un gasto, no hay reparaciones.

Incombustibles. El incendio suele propagarse desmesuradamente en los armarios de madera. El mobiliario de acero elimina este riesgo. El fuego que se origine en ellos no se extiende.

Mejor apariencia. Entre un estante de acero bien trabajado y uno de madera, no cabe comparación en cuanto a vista.

No admiten animales. La polilla destructora de la madera y demás animales no tienen medio de criarse en estos muebles de acero.

EL MAYOR ALMACEN EN EL CANADA

Abajo está una vista tomada en la casa THE T. EATON CO. LTD., TORONTO, CANADA. Esta Compaía posee el mayor almacén en el Dominio del Canadá, y ha instalado gran número de nuestros armarios para los empleados, algunos de los cuales se pueden ver aquí.



D. 22. ALACENA PARA MATERIALES

Se adapta para el resguardo seguro de gran variedad de piezas pequeñas y herramientas. Es una necesidad en toda fábrica. Se contruye en tamaños especiales ya aceptados, o de cualquier tamaño, y arreglo de anaqueles y departamentos.



D. 35. GUARDARROPA

Esta es nuestra última producciôu en la manufactura y diseño de armarios. Tiene la apariencia hermosa y acabada que permite su uso donde el armario ordinario de metal se veria mal.

COURTESY OF THE DENNIS WIRE & IRON WORKS CO. LIMITED

BRIGDENS LIMITED

are in a position to translate and print in Spanish or other languages any class of advertising literature.

CANADA'S CHANCE

"It's an ill wind that blows nobody any good"—and Canadian Manufacturers, who have read the articles lately appearing in the Canadian Press, are realizing that "Progress," and not "Panic," "is the order of the day."

Progress and Prosperity for all—"if" . . . .

IF "Opportunity," knocking at Canada's commercial door is bidden to enter—as a *permanent* guest.

IF "Industry," the only true salvation of any country, is given precedence over mere "schemes to make money."

IF Canada is alive to her unprecedented Commercial Chance.

This "talk" applies very strongly to the *Canadian Furniture Trade.*

The illustration here shown is a reproduction by the "half-tone" engraving process of "Made-in-Canada" Furniture.

Appearance and quality are apparent at a glance—yet Canada, with her vast natural resources so aptly fitted for such a trade, has been "going abroad" for Modern Furniture.



BRIGDENS LIMITED fulfil a useful capacity in Canada's commercial advance by supplying Manufacturers with accurate and attractive illustrations of their products.

In the activity which is now taking place among Canadian Manufacturers, and in the inevitable spread of this activity, there will be a larger scope than ever for "Brigdens Complete Service."

FURNITURE FACTS

In 1912 Canada imported from Europe $231,451 worth of Furniture, of which $17,218 worth came from Austria and Germany.

In 1913 the importations were $333,287, Austria and Germany's share being $31,674.

In 1914 (fiscal year ends March, 31st) Europe took $333,626 from Canada for Furniture, and Austria and Germany secured $29,047 of this rich prize.

And now European Commerce is dislocated and demoralized by the most stupendous war in the world's history. It is a question whether British or other European factories will be able to supply Canada's Furniture demand in 1915, and Austrian and German Furniture is "not wanted," even were it available. It does not require much penetration to see "Canada's chance" in the few facts and figures stated on this page.

Canadian Manufacturers of Furniture who will communicate with us will receive prompt and efficient service in the compilation of Catalogues or other illustrated advertising matter.

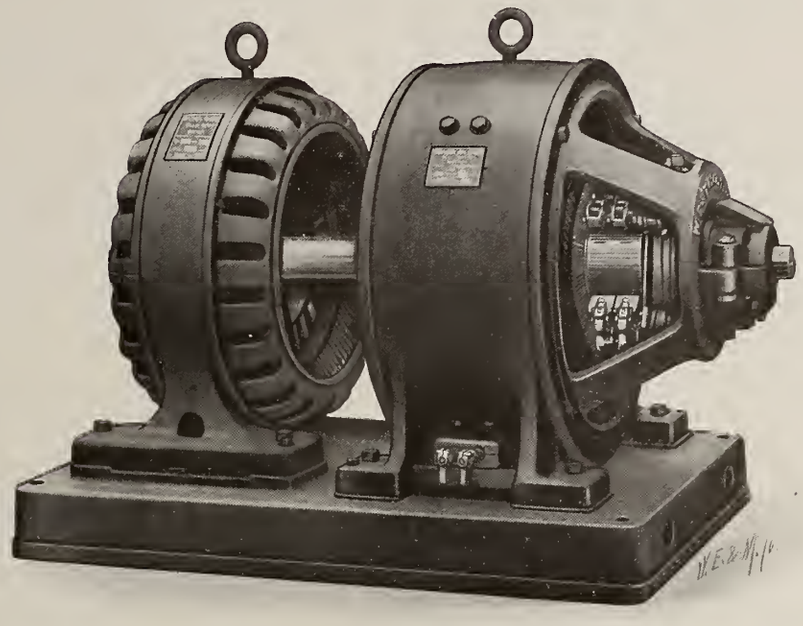
BRIGDENS LIMITED

ARTISTS :: PHOTOGRAPHERS :: ENGRAVERS :: PRINTERS

TORONTO, ONT.
160-164 WEST RICHMOND STREET

MAKERS OF HIGH-CLASS CATALOGUES

WINNIPEG, MAN.
NOTRE DAME and LANGSIDE AVE.



50 KW. Westinghouse Motor Generator Set

Reliability and Efficiency Are the Dominant Features of **Westinghouse Motor Generator Sets**

THEY require practically no attention beyond an occasional inspection and lubrication.

The overload capacity is ample for all normal conditions, and very high momentary overloads are handled without injury to motor or generator.

All bearings are dust-proof and automatically lubricated by oil rings.

A motor starter and a generator field rheostat for regulating the voltage, are supplied with each set.

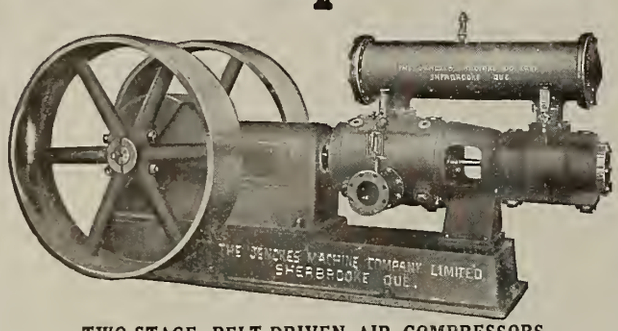
These sets are made in standard sizes ranging from 2 to 100 kilowatts. The motors are made for polyphase 220, 440, 550 and 2200 volt circuits. The generators are wound to supply current at 125 or 250 volts.

Canadian Westinghouse Co., Limited, Hamilton, Ont.

TORONTO Traders Bank Bldg. | MONTREAL 52 Victoria Square | HALIFAX Telephone Bldg. | FORT WILLIAM Telfer Bldg. | WINNIPEG 158 Portage Ave. East

CALGARY Grain Exchange Bldg. | EDMONTON Dominion Bldg. | VANCOUVER Bank of Ottawa Bldg.

Air Compressors



TWO-STAGE, BELT-DRIVEN AIR COMPRESSORS

EFFICIENT, RUGGED

Moderate in cost. Built to successfully stand severe and continuous service. Full range of sizes and types.

Write for Bulletins

THE JENCKES MACHINE CO., LIMITED

Works :
Sherbrooke, Que.
St. Catharines, Ont.

Sales Offices :
Halifax, Montreal
Toronto, Cobalt
South Porcupine
Vancouver

THE CANADIAN BANK OF COMMERCE

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L.,
President.

ALEXANDER LAIRD, General Manager
JOHN AIRD, Assistant General Manager

Capital	-	-	$15,000,000
Rest	-	-	$13,500,000

SAVINGS BANK ACCOUNTS

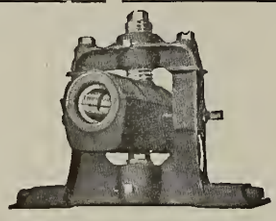
Interest at the current rate is allowed on all deposits of $1 and upwards. Careful attention is given to every account. Small accounts are welcomed. Accounts may be opened and operated by mail.

Accounts may be opened in the names of two or more persons, withdrawals to be made by any one of them or by the survivor.

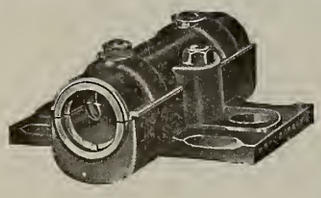
Power Transmission, Elevating and Conveying Machinery



Rigid Post Brackets



Bale and Socket Adjustable Pillow Blocks



Rigid Pillow Blocks

Wire Screens
Perforated Metals
Bolting Cloth



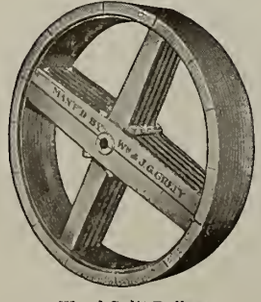
Sprocket Chain and Attachments



Steel Conveyor and all Accessories



Sprocket Wheels



Wood Split Pulleys
Iron and Steel Pulleys

Wm. & J. G. Greey - 6 Church St., Toronto

Manufacturers

Flour - Oatmeal - Cereal Machinery, Grain Choppers, Bakers' Machinery, Trucks, Power Transmission, Elevating and Conveying Machinery

INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XV. | TORONTO, NOVEMBER, 1914 | No. 4

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

SUBSCRIPTION

Two Dollars per Year **Single Copies 20 cents**

Advertising Rates made known on application

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United States Defines Contraband.

THE Government of the United States has defined its attitude in regard to contraband of war. This definition is to the effect that citizens of that country can sell contraband of war, including firearms, to belligerent nations, without violating United States neutrality, but that it is the duty of belligerents to prevent contraband shipments reaching the enemy, and not the duty of the neutral nation to bar these shipments in the beginning, or at all. All such goods, if contraband, will be shipped at the risk of those who sell them. If the goods are seized by an enemy of the belligerent to whom the goods were sold those responsible for the shipment will have to be satisfied with their loss in the case of contraband.

While in accordance with neutrality, this attitude, owing to the present circumstances of the war, favors the allies, and will favor them so long as they command the sea. Great Britain, France, Russia, Japan and Belgium will be able to buy supplies freely in the United States, a privilege denied to Germany and Austria by the inferiority of their fleets.

That this enormous advantage would be quickly seized was, of course, certain, and already numerous orders have been placed in the United States, not only by France, but also by the British Government.

Canadian manufacturers, while anxious to keep their factories running, realize that the matter of supreme importance in the civilized world just now is that Great Britain and her allies shall win, and if buying extensively in the United States or any other country will hasten the inevitable victory, Canadian manufacturers will be the first to support such a purchasing policy.

At the same time, the importance of helping our factories must be emphasized. Possibly the British War Department does not realize how big our factories are. Canadians are in a position to make huge quantities of blankets, saddles, shoes and other articles which will be needed in the field.

When requirements of time and quantity do not intervene, we feel certain that the British Government will keep as many orders as possible "in the family." This belief is strengthened by the following interview given in Toronto on October 20th by the Hon. Robert Rogers, Minister of Public Works:—

"We learned some time ago that the Imperial Government was purchasing supplies in the United States, and we at once notified the War Office that all, or nearly all, these supplies could be purchased to advantage in Canada. The War Office at once saw the propriety of throwing all the business they could our way, and almost immediately some very large orders were received. For example, they ordered 800,000 pairs of blankets, but we were only able to furnish 500,000. Then, through the War Office, we received orders for harness, saddles and saddlery hardware from the allies amounting to at least $4,000,000. The War Office also sent over F. W. Stobart, well known in Canada, who was for years in business in Winnipeg. He brought with him orders for supplies amounting to several million dollars, and is receiving additional commissions daily. He has ordered a million shirts, a million sweaters and many other supplies.

"We are taking good care of the farmer also. Just now we are buying great quantities of hay, paying $18 per ton f.o.b. Montreal. We have also purchased two million bushels of oats, and these oats have been pur-

chased from the grain-growers direct without any profit to the middlemen. I am going to Fort William to superintend the bagging and shipping of these oats to England. The business is rather out of the ordinary, because grain usually goes in bulk. Our directions are to have the grain bagged; to get it bagged according to specifications, to find boats to carry it from Fort William to tidewater and the necessary ocean tonnage all involve an immense amount of detail and hard work."

Bank Buys Foreign Advertising Matter.

WE have just been informed on good authority that one of the wealthiest chartered banks in Canada has placed a $10,000 order for advertising matter, such as calendars, in the United States. Probably this same bank is refusing credit to various Canadian manufacturers on the ground that the available business in sight does not justify loans. Yet it sends to the United States an order which could easily be filled here.

Imitation is Best Flattery.

WE notice that the Illinois Manufacturers Association, composed principally of Chicago manufacturers, considers "that the time is propitious to engage in the active extension of their trade in Canada."

We notice also that at a recent luncheon of this Association, Mr. James Keeley, Editor of *The Chicago Herald,* made the following statement:—

"I believe every American manufacturer should carry on his goods, literature and letter heads—Made in the United States. The development of a nationalistic business loyalty will mean more full dinner pails, more prosperity, and the mills of North America will be working overtime."

We thoroughly agree with Mr. Keeley, and consider his advice so good that we have no hesitation in advising Canadians to adopt it.

German Patents.

SINCE the outbreak of the war much speculation has been aroused over the possibility of suspending German patents in Canada, and the Government has received many requests for the publication of such patents. The Government has decided not to publish a list, fearing that speculators would use it to obtain privileges at the expense of the people at large.

The Order in Council, which appeared in the October issue of INDUSTRIAL CANADA, gives the Commissioner of Patents the power to order the avoidance or suspension in whole or in part of any patent or license if the person applying intends to manufacture the patented article in Canada, and if it is in the interests of the country that such a manufacturing process should be carried on. Even if the publication of a list of German patents were thought desirable by the Government, the difficulty of procuring such a list would have deterred the undertaking.

The life of a patent is eighteen years, therefore it would be necessary to examine all patents granted during that period just expired and determine the nationality of all the grantees, as the assigning of patents in whole or in part is very common and frequent. The process of determining the nationality of all the assignees would be very difficult, if not impossible in some cases, as over 8,000 patents a year are issued, of which 300 go to Germans. The definition of the nationality of the present holders or assignees would be an extraordinary task. The officials of the department, therefore, are probably wise in making it difficult for speculators to rush in, form companies, and sell stock on the strength of having secured patents of more or less dubious value. At the same time, if it is in the interests of the country to cancel or suspend a patent the necessary power has been secured.

A Farm Journal's Idea on "Back to the Land."

ALL Canadians recognize the importance of increasing agricultural production, but all are not agreed on the best method of accomplishing this result. Some favor breaking up considerable tracts of new land under government or municipal supervision; others advocate the appointment of Commissions composed of the ablest men available for the purpose of co-operating with the farmers; others believe that the existing machinery, such as Departments of Agriculture and Agricultural Colleges, should do the work with what assistance the Government and private individuals can give them in the task of—first, aiding the farmers who are already on the land to increase their production, and, second, to secure the co-operation of these farmers in a gradual movement of the unemployed in cities back to the land.

The Nor'-West Farmer, one of the most reliable agricultural papers in Canada, treats the problem as follows:

"What all our Provincial Government should do, however, is to facilitate by all possible means the engagement with farmers' families of unemployed city people, both male and female. Such people, taken into homes already established, would be sure of plenty to eat and a chance to find a place in profitable farm work that is already organized. They would be able, honestly, in all true sense, to earn their living instead of receiving charity as is inevitable if they remain idle in our cities and towns.

"Another very important fact is that for most of the city people who are ever to get back to independent farming on their own land, this is really the natural route. On the whole, there is no better way to learn how to farm than to put in an apprenticeship with a practical farmer, and there is no more disgrace in being a farmer's hired man than in being the hired man of a machine shop, a departmental store or a publishing house. The hired man who hopes to farm on his own account gains valuable ex-

perience and skill at the risk and sometimes at the expense of his employer.

"All schemes of colony farms, 'ready-made' farms, small holdings for mixed farmers, etc., need to be thought out and tested out very carefully, and not rushed into headlong when we are overtaken by an industrial depression. It is quite true that many farmers could make a good living by intensive farming on small holdings—perhaps better than they make at present on larger farms—but this class of farming requires very careful specialization and skill and an intimate local knowledge of climate and soil. More than any other type of farming, it is unsuited to novices. In addition, it must be in districts conveniently located to large centres of consumption, and any such scheme is hampered by the wretched follies of land speculation which have temporarily encircled most of our cities with property held out of production by the over-capitalization of the subdivision maniac.

"The present time is opportune for discussing the question of how the Government might help agriculture generally, so as to establish the industry on a basis that it will fundamentally appeal to more people. It is not opportune for the launching of untried, radical measures which simply seek to transplant city people on to independent farms without full consideration of their fitness, knowledge and temperament.

"The road back to the farm is at present, and for years has been, easy to find, and really not so terribly hard to travel by all those who wish to go that way."

Smuggling in German Goods.

ATTEMPTS are being made to smuggle German goods into Canada. Some time before the war an Ontario company purchased a German sandblast machine. The effort to hold business is illustrated by the following letter, dated September 29th, received by the company from a New York concern:—

"We enclose herewith a list of spare parts we have in stock that may be required by you as renewals for the sandblast machine you have in operation. This list represents what we have left in stock of these parts for your particular type of machine. The European war has made deliveries of spare parts rather an uncertain thing. Our forwarders advise that certain shipments are coming through from neutral ports, but there is great uncertainty regarding the time when these parts may be received.

"Therefore we have decided to draw your attention to these parts now in stock, and we urge you to avail yourselves of as many of them as you feel you will require, for it would be better if you were to have parts on hand than to find yourselves unable to secure renewals in the time of urgent need. If we could be at all certain as to when our shipments will arrive we would advise our customers, but in the absence of this knowledge we feel this is the only course we can pursue for your protection.

"We advise you to order without delay."

Canadian manufacturers should remember that it is unlawful to import German goods from the United States if such goods were exported from Germany after August 5th.

In this case the company properly refused the offer, and, upon enquiry, found that a Canadian concern was prepared to make the necessary parts.

Syndicates for Export Trade.

IN order to develop export trade, Canadian manufacturers are now considering the advisability of forming syndicates for the purpose of sending experienced salesmen abroad to canvass actively for orders. Such syndicates would be composed of from five to ten non-competing manufacturers who, by pooling the expenses of a traveller, could get results at a comparatively small outlay. At present there are numerous salesmen in Canada who are well qualified to represent such syndicates. There is no doubt that few orders can be secured abroad except through the agency of visiting salesmen, and the formation of syndicates seems to be the most practical way of cutting the cost of engaging them.

Promoting U. S. Exports to South America.

SPECIAL measures are being taken by the Government of the United States to assist export trade as a result of the war, and United States manufacturers and exporters believe that they can greatly increase their trade to South America.

The new organization for promotion of United States commerce in Latin America, which applies in a similar way to all over the world, is described as follows by the Honorable William C. Redfield, Secretary of Commerce of the United States:—

"The Department of Commerce will place this fall at Buenos Aires, Santiago, Rio de Janeiro and Lima trained commercial attachés familiar with the language and the customs of the countries to which they are accredited who will furnish, through the Department of Commerce, a general outlook over the commerce and industries of the nation in which they reside. The work of these officers is not intended to supplant in any way the efficient labors of the Consular service. On the contrary, the two services work not only in harmony, but in mutual helpfulness, one supplementing the other. The Consul has many duties other than commercial ones which he must perform. The commercial attaché will have none but commercial duties.

"Furthermore, the Consular service affords the local and intensive commercial outlook and the attaché furnishes the general and extensive viewpoint in the countries in which both serve.

"To this force is added that of the commercial agents, who are travelling specialists, as hereinafter pointed out.

There thus exists a threefold force in the foreign field—the general, the local, and the mobile force. This is now supplemented by the creation this year of a special organization at home to make efficient the use of the information collected abroad. To the central office in Washington there have now been added offices as below stated in seven important American cities. It is hoped to extend this service as funds permit. To these offices all the information available in the bureau itself is sent, and through them the trained representatives of the bureau meet personally the commercial interests of the centres in which these offices are located. To these offices the Consuls and commercial agents and attachés go whenever they visit this country. There they can meet by appointment anyone interested in the commerce of the country from which they come. Using these offices as a centre they can call upon the commercial houses which shall have indicated their interest in the commerce of the country in question.

"In short, this puts the service of the department as nearly as possible at the door of every commercial house interested in our foreign trade. It is recognized that this organization, both at home and abroad, is not as large as the commercial interests of our country require, but it is at least a definite beginning in the right direction.

"Congress has granted a special fund of $50,000 to be used to promote our commercial relations with Central and South America, and this fund will be applied promptly to service partly in Washington, but mainly to despatch to Latin American countries a number of special agents who will investigate trade conditions in connection with specific industries. Already four such agents have been appointed, each with special qualifications for the investigation which he is to make.

"Another fund of $75,000 is being used in part for the employment of commercial agents of the Bureau of Foreign and Domestic Commerce who are stationed in seven important trade centres in the United States. These agents are in charge of branch offices in Boston, New York, Chicago, Seattle, San Francisco, New Orleans and Atlanta, and are engaged in the efficient distribution of the trade information which reaches the department in such volume.

"This fund also permits the appointment of commercial agents to carry on special investigations in foreign countries other than those of Latin America.

"As though in anticipation of the special demands upon the department, Congress has also, as above explained, approved the appointment of commercial attachés, who will further supplement our trade promotion work in foreign countries. An appropriation is available sufficient to permit the appointment of ten such trained trade representatives, and these experts will soon be stationed in such cities as Rio de Janeiro, Buenos Aires, Santiago, Lima, London, Paris, Peking, St. Petersburg, and, as conditions permit, in other cities. These men will not duplicate the work of Consuls or commercial agents, but will supplement their service in special fields which are not at present adequately developed.

"A very special interest has been shown by manufacturers and exporters in the opportunities for the extension of our trade with Latin America. Fortunately, the Bureau of Foreign and Domestic Commerce had already gathered a very large fund of specific information in regard to markets in that part of the world and had made it available in the publications which are listed in pamphlets which are available to all.

"Further, the Consular officers in the countries to the south of us have been under special instructions to transmit promptly reports on current conditions."

These extensive preparations on the part of the United States show that they consider the South American market a valuable one which is worth making great efforts to capture. Apparently the Department of Commerce of the United States is not dismayed by the difficulties and dangers which they admit undoubtedly exist.

Made-in-Canada Policy Must Be Permanent.

IF the "Made-in-Canada" movement is to be of any real benefit to Canadian industry it must be permanent. Unless the policy is sustained the creation of the demand for home products will be injurious rather than beneficial. If the enthusiasm subsides after a temporary artificial market has been established worse depression will follow than that which existed before the movement began. Encouraged by the adoption of the "Made-in-Canada" policy by Canadian buyers, manufacturers are buying raw material, buying machinery and engaging employees. If the policy falls to pieces after a brief boom the loss of the manufacturers will be greater than if it had never been put into effect.

Canadians should make a five-year renewable vow to give preference to their own country's goods.

Ten Industrial Commandments of Germany.

THE civilized world admires commercial Germany as much as it hates military Germany. The amazing success of German manufacturing is too well known to require comment, but it is interesting to notice the following, which purport to be the ten industrial commandments of Germany:—

Your money should profit no one but Germans.

Never allow foreign eatables to be served at your table.

Never profane German factories by using foreign machinery.

Use only German clothes for your dress and German hats for your head.

In all expenses keep in mind the interests of your own compatriots.

If you do not like German malt coffee, drink coffee from German colonies.

Write on German paper with a German pen and use German blotting paper.

Never forget that when you buy a foreign article your own country is the poorer.

German flour, German fruit and German beer alone give your body the true German energy.

Let not foreign flattery distract you from these precepts; and be firmly convinced, whatever others say, that German products are the only ones worthy of citizens of the German fatherland.

By substituting the word "Canadian" for the word "German" we get a very compact "Made in Canada" policy.

Manufacturers Must Lead the Way.

"OUR Purchasing Department has been instructed to turn all the orders it can into Canadian channels."

This statement was recently made to INDUSTRIAL CANADA by the manager of one of our largest manufacturing companies.

It embodies the policy which must be adopted by Canadian manufacturers or the "Made-in-Canada" campaign will be a farce.

The people of our cities, towns and villages will laugh at the appeal to buy Canadian goods if they see Canadian manufacturers, their prominent fellow-citizens, buying imported automobiles, clothing, and house furnishings for their homes, or imported raw material and equipment for their factories.

Labor's Opportunity.

THE success of the "Made-in-Canada" campaign depends to a considerable extent upon the industrial workers. Quality, in the last analysis, is the only thing that will retain popularity for goods which may be bought now for patriotic reasons. Quality is the result of faithful work and intelligent study by employees as well as by employers. The most pardonable pride is the pride of a man in the product of his labor. Unfortunately, many of the labor unions aim not only to restrict output, but also to encourage indifference towards the quality of manufactured articles. The closed shop advocates say, "Do not work too hard or too well. The skilful workman should not set the pace for the unskilful." The result, too often, is an enervating equality of endeavor which reflects itself in the products. Individuality suffers.

The Germans attained their industrial superiority largely through their remarkable organization of employees. Though the labor unions were powerful, strikes were almost unknown because they were avoided by the expedient of calling the strikers, who were also army reservists, to the colors. While the method was questionable, the benefit was obvious. Because the workers enjoy more liberty in Canada is no reason why they should make their liberty a license to do poor work. The German workmen were loyal to their country when they produced articles which competed successfully in world markets. If Canadian goods are to equal German goods, Canadian workmen must decide, of their own free will, to put their best thought and efforts into their daily tasks.

Quality of Goods Brings Quantity of Sales.

THERE are sufficient indications that the people of Canada are responding to the patriotic appeal to buy goods made in our Canadian factories during the war. It is one thing to get orders and another thing to hold them. The manufacturers are faced with a responsibility if they are to hold the customers who are buying their goods in order to keep Canadian factories busy. They must take care that these goods shall be of a quality which will stand comparison with foreign goods.

If a few Canadian manufacturers yield to the desire for profits at the expense of quality discredit will be brought upon the whole body of manufacturers to some extent. When people take the trouble to ask specially for "Made-in-Canada" goods they should get the worth of their money. Dissatisfied buyers will be unwilling in future to govern their purchases by their patriotism if they receive articles of inferior manufacture. We believe that the majority of Canadian manufacturers will not only seize the opportunity to utilize the increased volume of business for the improvement of quality, but will also see that a possible minority of the less scrupulous shall not bring discredit on and inflict injury to the good name of Canadian industry.

This is an opportunity to improve the quality of Canadian-made articles to such a degree that they will successfully meet competition in the Canadian market and challenge it abroad.

THE WAR

DO you know that the war is aiding agriculture enormously?
Do you know that great industrial unemployment is threatened?
Do you wish to stay this unemployment, and, at once, lift Canada to prosperity—a prosperity which will be on a safer basis than ever?
Do you know that, commercially, the one great trouble with Canada to-day is that suddenly she can no longer borrow $400,000,000 a year?
Do you know that this can be turned from an evil to a great advantage?
Suppose Canada increased her exports $200,000,000 and cut her imports down $200,000,000,
Wouldn't we have the $400,000,000 capital—and no interest to pay on it through the future?
How shall we do this?

IRON, STEEL AND MACHINERY IMPORTS INTO CANADA

How Many of These Articles Can be Made by Canadian Manufacturers?

IN the statistics of imports of manufactured goods entering Canada appears the following item: —

"Other manufactures, articles, or wares, of iron or steel, or of which iron or steel, or either, are the component materials of chief value, N. O. P., $11,765,265."

Under this classification are included numerous articles "not otherwise provided," that is, not specified by name in the returns.

As a result of the war, Canadian manufacturers are looking for new trade fields, and among these miscellaneous items there may be many the manufacture of which would be profitable. The following analysis has been made by the Department of Customs. In cases where manufacturers would like to know the value of the importations, INDUSTRIAL CANADA will be glad to secure the figures from the Department and forward them:—

Manufactures of Iron, N. O. P., Imported into Canada.

Vacuum Sweepers
Seal Presses
Iron Plates
Gas Generators
Galv. Iron Fountain
Tubular Steel Poles
Street Flushers
Rail Bonds
Car Fenders
Plate Supports
Track & Hangers
Gas Plant Material
Steel Lockers
Steel Barrels
Steel Columns
Steel Drums
Twisted Bars
Tanks
Inserts
Hydrants
Boilers, Galv.
Gilman Attachments
Boxes
Shapes
Flanges
Greenhouse Fittings
Steelcrete
Cooling Tower
Vault Parts
Milk Cans
Steel Barrels
Steel Rails
Shells
Structural Steel
Casements
Carriers
Moulding
Mixer
Sprinkler
Window Sashes
Flanges
Covers
Plates
Window Sashes
Fire Escape Parts
Plate Couplings
Skidding Carriages
Boxes
Reinforcements
Expanded Metal
Door Frames
Fire Doors
Cylinders
Galv. Boilers
Roofing Straps
Sprinklers
Bands
Heaters
Fuel Economizer
Twisted Squares
Gates, Water
Water Meters
Scrapers
Anchor Rods
Interiors
Replacers
Mauls
Storage Tanks
Stop Cock Boxes
Pails
Cooler
Architectural Works
Toe Calks
Ovens
Cylinders
Ballast Unloader
Chopper
Tanks
Breadmakers
Iron Pins
Flanges
Oil Cans
Hoops
Bottle Coolers
Grates
Dumping Buckets
Wheel Blanks
Brake Material
Coils
Grate Shakers
Valves
Columns
Cooling Boxes
Finished Castings
Iron Doors
Iron Kettles
Car Wheels
Retort
Fireless Cookers
Steel Shields
Iron Lusts
Icemaking Plant
Transmission Material
Water Gates
Revolving Elevator
Grinder
Casings
Brick Dryer
Gear Plates
Radiators
Switch Signal Fittings
Part of Tunnel
Softening Plant
Car Beds
Ice Moulds
Refrigerating Plant
Concrete Reinforcements
Engine House Connections
Stamp Vending Machines
Stamped Steel
Mesh Steel
Posts, Cast Iron
Steel Tapers
Steel Platforms
Templates
Vacuum Cleaners
Steel Bars
Brackets
Cylinders
Elevator Machinery
Differentials
Ovens
Rail Joints
Spirals
Water Still
Rims
Metal Laths
Blasting Saps
Condensors
Cement Reinforcement
Ornamental Fence
Coils
Milk Cans
Hydrants
Crates
Car Wheels
Coke Extractor
Lockers
Steel Barrels
Poles
Coal Machinery
Tubes
Laggings
Roofing
Asbestos Metal
Barrels
Stove Trimming
Anchors
Grates
Valves
Boiler
Rods
Digester
Radiator
Ornamental Iron
Steel Bars
Fire Places
Dry Kiln
Refining
Steel Bar Cases
Milk Cooler
Oil Well Supplies
Man Lifts
Parts for coal pit cars
Columns
Cylinders
Fire Doors
Pipe Moulds
Car Wheels
Tanks, etc., for sugar refineries
Powder Cans
Iron Pans for refrigerating
Bridge Plates
Forge
Furnace
Flue
Steel Tower
Furnaces
Coal Chutes
Economizer
Cylinder Mould

Machinery Imported into Canada.

Another N. O. P. item in the statistics of imports is:

"All machinery composed wholly or in part of iron or steel, N. O. P., and iron and steel castings, and iron or steel integral parts of machinery, $19,789,912."

How much of this miscellaneous machinery, which is now imported, can be made in Canada?

Bridge Erecting Machinery
Hobbing Machinery
Diamond Saw
Counter Shaft
Bank Note Machinery
Conveyors
Turntables
Extractors
Vertical Machinery
Roller Bearing Machinery
Lathe
Stoker Machine
Bottle Washer
Bottle Filler
Rail Grinder
Still Machine
Raker
Air Compressor
Welder
Turning Machine
Sheet Steel Machine
Milling Machine
Pulverizer for Brick Yard
Water Motors
Plunger
Couplings
Grinder Machine
Veneer Machine
Pipe Machine
Clay Working
Glass Making
Edging Machine
Air Condensers
Ice Cream Freezer & Mixer
Wrapping Machine
Polisher and Rolling Table
Ripener & Churn
Nut Machine
Lathes & Drills
Collars & Sprockets
Elevator & Recording Gauges
Laundry Machinery
Ice Machinery
Soda Water Machinery
Receiving Separators
Excavating Machinery
Water Meters
Carbonators
Freezers
Color Printer
Plastering Outfit
Brick Machinery
Watch Machinery
Testing Plant
Blue Print Machinery
Refiners Machinery
Freezer (Ottawa Dairy)
Refrigerating Machinery
Press Rolls
Water Wheel Machinery
Ore Handling Machinery
Labelling Machinery
Ore Handling Bridge Crane
Wood Working Machinery
Meat Slicer
Silk Machinery
Reverse Gears
Hoisting Machinery
Clay Working Machinery
Grain Loader
Sharpener
Blowers
Oil Pumping System
Exetor
Ditcher
French Machinery
Cement Block Machine
Lard Pail Crimper
Adjustable Oat Groats
Bottle Filler
Elevator parts
Bell Buoy Machinery
Bucket Excavator
Planer & Matcher
Wrapping Paper Machinery
Pipe Threading Machinery
Spider for dryer
Hoists
Slitter
Sugar Packing Machinery
Press Equipment
Bottle Washing Machinery
Milling Machinery
Elevator Machinery
Tool Grinding Machinery
Honing Machinery
Oil Well Machinery
Steam Hammer
Under Reamers
Conveying Machinery
Flour Mill Machinery
Polishing Machinery
Lifting Jacks
Diving Apparatus
Bone Grinder
Ejector
Box Making
Power Sprayers
Nail Making Machinery
Gravel Washing
Leather Press
Can Making Machinery
Sugar Refining Machinery
Mechanical Stokers
Rock Breaking Machinery
Barrel Hoop Nailer
Bag Dryer
Granulators
Gas Enchanter
Packing Machinery
Brick Making Machinery
Boring Machinery
Bakery Machinery
Bolt Cutters
Interlocking Switch Plant
Water Wheel Machinery
Unloader
Flour Mill Machinery
Flour Packers
Warehouse Separators
Flour Mill Machinery
Sprayers (potatoes)
Polishing Machinery
Powder Drills
Elevator
Scavengering Machine
Air Brake
Can Making
Turbo Blower
Milling Cutters
Hoist
Separator
Stamping
Excavating
Welders
Pusher Mill
Power Conveying & Backing System
Candy Machinery
Wire Forming Machinery
Sugar Conveying Mach.
Forge & Blowers
Rail Loader
Soap Press
Dry Dock Machinery
Riveter
Signal Device
Air Washing Machinery
Closing Machinery
Clinching Machinery
Turbine Set
Generator
Drilling Machinery
Elevator Machinery
Dredging Machinery
Road Grader
Friction Clutches
Beader & Nailer
Coffee Mills
Meat Choppers
Blue Print Machinery
Turbine
Bottle Soaking Machinery
Bronzing Machinery
Vacuum Cleaner
Towing Machine
Water Softener
Shearing Machine
Grain Separators
Stone Planes
Will Augers
Rock Furnaces
Lining Machines
Sand Drying Machinery
Brewery Machinery
Automatic Riveters
Steam Punch
Wire Looping Machine
Folding Machines
Burnishing Machine
Soap Presses
Air Compressors
Railroad Ditcher
Soaker
Rotary Filler
Split Gears
Drawing Press
Labelling Machine
Box Machine
Lasting Machine
Shoe Machine
Sugar Refining Machinery
Loaf Moulder
Mixers & Parts
Oil Engine Fittings
Excavating Machinery
Steam Traps
Lathe & Pin Slotters
Fish Plates
Pneumatic Tools
Lathes
Counter on Skids
Brick Kiln Machinery
Filtration Machinery
Candy Wrapping Machinery
Brewery Machinery
Hydraulic Press
Machinery Drills
Automatic Rubberizer
Steel Brackets
Stamp Mills Machine
Turrett Machine
Paper Mill
Distilling Machinery
Erection Machinery
Construction Machinery
Refrigerator Machinery
Wire Fence
Hydraulic Jack
Baker's Mixing Machine
Bevel Gear Planer
Wood Working Machinery
Wire Making Machinery
Steam Turbines
Punching & Shearing Mach.
Candy Making
Gas Producers
Gas Exhausters
Cutting Machinery
Bread Oven
Power Press
Incasing Press
Water Wheel Buckets
Toggle Press
Grain Elevator Machinery
Electric Mining Machinery
Sticher Machine & Finisher
Filter Presses
Mining Machinery
Conveyor
Stand Shovel Machine
Dredging Machinery
Hydraulic Jacks
Riveting Machines
Coupling Machines
Wrapping Machines
Cream Ripener
Heating
Lathe & Hammer
Die Blocks
Box Machinery
Hoist
Candy Wrapping
Left hand Lever Shears
Ice Making Machinery
Dishwashing Machinery
Barker
Drilling Outfit
Pneumatic Type Blower
Belt Tripper

Chemical Machine
Bridge Moving Machine
Ice Machine
Cigarette
Bottle Cap
Lath Press
Automatic Feeders
Vulcanizer
Automatic Bolt Screwing Machinery
Propellers
Machinery for Pocketing Tobacco
Candle Machines
Polishing Machines
Hoisting Machines
Leather Settling Machines
Pipe Cutting
Punching Machine
Ice Machinery
Insulating Machinery
Hoisting Machinery
Planing & Flattening
Generators
Tobacco Machinery
Constructor's Outfit
Gas House Machinery
Recorders
Malting Machine
Superheaters
Enrobing Machine
Bottle Washing Machine
Chocolate Machine
Overhauling Machine
Spindles
Pile Hammer

UNITED STATES AFTER SOUTH AMERICAN TRADE

Report and Recommendations of Latin American Trade Committee, Appointed by the Honorable W. C. Redfield, Secretary of Commerce of the United States

CANADIAN manufacturers who hope to develop export trade with South America will notice with interest that the manufacturers of the United States are making extensive preparations to do likewise. The committee believes that many commercial opportunities exist, but warn exporters against rash attempts without preparation.

An informal conference, assembled at Washington, D.C., on September 10th, 1914, by the Secretary of State and the Secretary of Commerce, brought together a number of diplomatic and consular representatives of republics of South and Central America, and representatives of American business and of commercial and industrial organizations, including the Chamber of Commerce of the United States of America, the Southern Commercial Congress and the National Foreign Trade Council. After a general discussion, which brought forth prominently the commercial needs of both the United States and the sister republics, a resolution was adopted requesting the Secretary of Commerce to appoint a general committee on Latin-American trade, to consist of the members of the Latin-American Committee, already appointed by the National Foreign Trade Council, and representative men from various parts of the United States.

Strong Committee Appointed.

Secretary Redfield accordingly appointed as members of the committee:

John Barrett, Director-General, the Pan-American Union, Washington, D.C.; William Bayne, President of the New York Coffee Exchange, New York, N.Y.; W. B. Campbell, President, Perkins-Campbell Co., Cincinnati, Ohio; Robert Dollar, President, Robert Dollar Co., San Francisco, Cal.; James A. Farrell, of New York, Chairman National Foreign Trade Council; William A. Gaston, President, National Shawmut Bank, Boston, Mass.; J. P. Grace, President. W. R. Grace & Co., New York, N.Y.; Fairfax Harrison, President Southern Railway Co., Washington, D.C.; Alba B. Johnson, President Baldwin Locomotive Works, Philadelphia, Pa.; C. J. Owens, Managing Director Southern Commercial Congress, Washington, D.C.; Lewis W. Parker. President Parker Cotton Mills, Greenville, S.C.; William E. Peck, President William E. Peck & Co., New York, N.Y.; William Schall, Muller, Schall & Co.. New York, N.Y.; E. P. Thomas, President United States Steel Products Co., New York, N.Y.; J. H. Waddell, Hard & Rand, New York, N.Y.; Daniel Warren, American Trading Co., New York. N.Y.; Harry A. Wheeler, Vice-President Union Trust Co., Chicago, Ill.

This Committee has just reported as follows:

The products of Agentina, Brazil, Chile and Peru exported to the United States differ each from the other, and are dissimilar in turn from those which we in this country import from Bolivia, Colombia, Ecuador, Paraguay, Uruguay and Venezuela, from the Central American States, and Panama, from Mexico and from Cuba, the Dominican Republic and Hayti. These products, for the purposes of this analysis, may be considered together as raw materials, just as the goods which we export to these countries may be classified as manufactures. Mutual advantage for both the United States of America and the other republics lies in a wider interchange.

In a properly comprehensive report the trade of the United States with each of the Latin-American republics should be separately considered. We realize that in each case the problem is different and demands an individual solution. In general, however, this trade rests solely on exchange of commodities; that it has, in its essentials, been barter, with a settlement of balances through London, and has not been built up by extensive investment of foreign capital as has been the case with British and German trade.

The accompanying report deals with certain underlying principles applicable to our Latin-American trade as a whole. We feel that recognition of basic facts affords the only proper basis for meeting problems which while they differ in the several countries are, nevertheless, fundamentally the same.

Your Committee feels that articles recently appearing in the press regarding commercial opportunities in Central and South America have unduly emphasized the promising aspects thereof, and have, in most instances, failed to state that our exporters already doing business with these regions find that their sales have been decreased, rather than increased, owing to the war.

Your Committee recognizes the present time as one when competition is less effective than in the past and than it will be in the future, until European bankers, merchants and manufacturers recover from the effects of the war.

Your Committee, moreover, believes that an opportunity is now afforded to place the trade of the United States with other American nations upon a firm foundation, supporting a more comprehensive structure which may be built as the situation again more nearly approaches normal.

Your Committee feels, however, that there is great danger that our merchants and manufacturers unfamiliar with Latin-American conditions may be induced by recent publicity to undertake ventures in that field which not only will be unremunerative but actually disastrous, and, in their ultimate

result, make for a reaction of the very healthy and much to be desired interest in foreign trade now manifest throughout the United States, an interest which, if properly directed, should be of great permanent value.

South American Trade Conditions.

The trade of the principal South American countries with England, Germany and the United States is shown by the following table:

	Imports	
	1913	1914
Central America, West Indian Republic and Mexico	$224,685,344	$246,405,592
South America	217,734,629	222,677,075
	$442,419,973	$469,082,667

Imports and Exports of South American Countries from and to England, Germany and United States for Years Specified.

Compiled by the Bureau of Foreign and Domestic Commerce, Department of Commerce, from official reports of the respective countries.

		England.		Germany.		United States.	
		Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
Country.	Year.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
Argentina	1913	126,305,556	116,154,937	68,815,721	55,888,788	59,861,703	22,096,385
Brazil	1912	77,509,079	43,006,473	52,945,352	51,856,965	48,043,322	141,720,216
Chile	1912	38,599,282	55,340,706	33,189,070	28,321,776	16,806,341	24,526,811
Peru	1913	7,779,616	16,561,235	5,138,902	2,970,857	8,541,934	14,761,355
Equador	1911	2,835,854	986,148	2,385,758	2,139,552	2,591,629	3,190,069
Uruguay	1912	*12,575,508	6,508,127	*7,849,094	7,860,272	*5,638,402	2,655,371
Paraguay	1912	†1,295,248	‡799	†1,500,958	†843,459	†304,888	†590
Colombia	1912	†7,838,878	†4,376,182	†4,201,125	†1,854,211	†7,612,037	†15,832,882
Venezuela	1913	3,994,733	767,031	2,586,986	5,563,768	6,944,136	8,470,563
Bolivia	1912	3,528,042	26,044,974	6,423,802	4,357,101	1,787,321	152,583

* Figures are for 1911 and are taken from the Almanach de Gotha.

† Figures taken from U. S. Daily Consular and Trade Reports.

‡ Figures are for 1911 and are taken from Pan-American Union publication.

The above figures show that exports from Great Britain and Germany to South America considerably exceed imports from that region.

This balance in favor of Europe may, in a measure, be explained by the fact that proceeds of loans issued by the South American Governments in Europe are remitted, not in cash, but in goods.

American Exports Concentrated.

Our export trade to South American countries particularly, and to a lesser degree the Central American States, is concentrated. It is estimated that seventy-five per cent. of our principal exports to South America are the products of large organizations. Our principal exports to the River Plate may be roughly stated to consist of agricultural machinery and allied products, steel products, oil products—kerosene, gasoline, etc.—and printing paper of various kinds. Our exports to Brazil, Chile and Peru are largely limited to steel and oil products, locomotives and electrical machinery. Our trade in cotton cloths, shoes, stockings, wearing apparel and miscellaneous goods, has not made up an important part of the total because of our unwillingness or inability to meet British and German competition.

Even before the war our export trade to all Latin-America, and notably South America, had begun to decrease on account of the prevailing financial stringency. Our imports, however, increased in value, and the trade balance adverse to the United States for the fiscal year 1913-14 greatly exceeded that of 1912-13, both for all Latin-America and for South America alone.

The accompanying table shows the distribution of this trade:

	Exports	
	1913	1914
Central America, West Indian Republics and Mexico	$177,627,892	$157,530,244
South America	146,147,993	124,539,909
	$323,775,885	$282,070,153

Trade Balance Adverse to United States.

	1913	1914
In trade with Central America, West Indian Republics and Mexico	$47,057,452	$88,875,348
In trade with South America	71,586,636	98,137,166
In trade with all Latin-America	$118,644,088	$187,012,514

Effect of the War on South American Countries.

Since August 1st of this year the countries in South America whose currency is not already on a gold basis have experienced a serious depreciation of their paper money.

RECOMMENDATIONS OF THE COMMITTEE.

1. The establishment of a dollar exchange.
   - (*a*) By the ultimate creation of a discount market.
   - (*b*) Pending the establishment of a discount market, by the extension of adequate accommodation by banking institutions, and the establishment of reciprocal balances in the United States and in Latin-America for financing Latin-American trade.
2. Perfection of our selling machinery.
   - (a) By furnishing additional support to commission houses already familiar with Latin-American business.
   - (*b*) By forming associations of merchants and manufacturers to be jointly represented in Latin-America.
   - (*c*) By obtaining information as to the possibilities of developing retail stores in large Latin-American cities.

The export of copper, tin, nitrates, coffee and other products has been curtailed because of loss of the normal European markets. As indicative of financial conditions, bank holidays and moratoria were declared at the outbreak of hostilities, which were extended in certain countries from sixty to ninety days. The effect has been damaging to American exporters, as, under such circumstances, drafts due in August will not be liquidated until November or December. This means a large accumulation of draft indebtedness never contemplated by the shipper. Specie payments were suspended.

Collections throughout South America, therefore, are difficult. orders are falling off, and after our exporters have completed their contracts for this year, there seems less prospect for new business, unless steps are taken to relieve the situation.

Difficulties of Settlements for South American Trade.

Since the balance of our trade with South America is heavily against the United States, there should be exchange facilities which would enable our exporters to obtain payment from balances created in New York in settlement for goods imported into this country from South America.

Such balances, however, are not maintained in this country.

The external debt of the South American Republics (Federal, State and Municipal), amounts approximately to $1,632,488,580. The bulk of those funds were borrowed from Great Britain. South America therefore invariably has payments to make in London.

The greater part of South American banking business, moreover, is conducted by British owned institutions. These facts, together with the facilities offered by the London discount market, have induced German and other European owned banks trading in South America to maintain London agencies. Sterling credits, therefore, have been the basis of South American trade.

Our exports to, and imports from, Latin-America are shipped direct. They are, however (almost exclusively in South American trade, and largely in Central American trade), paid for in sterling bills of exchange.

United States exporters have, in the past, converted their dollars into sterling at the rate of the day, drawing against their South American customers at ninety days sight, payable in ninety days bills on London. Importers have accepted ninety days sterling bills, which they have liquidated at the current rate of exchange. This has necessitated the conversion of dollars into sterling in the United States, and a reconversion in South America from sterling into the currency of the buying country.

Thus, although the balance of the South American trade of the United States has been increasingly heavy against this country, we do not make settlement direct. We have been obliged, either by the shipment of gold or goods, to settle this adverse balance by remitting to England either gold or goods, to meet interest charges on the South American debt, and to pay for goods purchased in Europe by the South American countries.

Recent attempts to establish direct exchange with South America have not been successful in relieving the trade congestion incident to the dislocation of London exchange. A few New York banking institutions have been ready to extend accommodation to American exporters, but the credits available have been wholly inadequate. This fact, together with the difficulty of making collections in South America, has seriously embarrassed our exporters, while our importers, finding it practically impossible to dispose of New York bills to bankers in South America, have been penalized by the almost prohibitive cost of London credits.

Present Problems.

(1) Because of the war the Latin-American countries are confronted by the necessity:

(*a*) Of marketing their products despite the shrinkage of world purchasing power.

(*b*) Of obtaining funds to move crops and to continue indispensable industrial and agricultural development normally financed by Europe.

(2) The United States is confronted:

(*a*) By the necessity of holding its normal export trade with Latin-America.

(*b*) By the possibility of increasing their trade by filling Latin-American needs for merchandise hitherto purchased in Europe, which Europe cannot now supply.

The solution of these problems depends upon:

(1) Production.

(2) Transportation—Shipping and Insurance.

(3) Financing:

(*a*) Of Production.

(*b*) Of Transportation.

(*c*) Of Settlements.

Production in the United States can be maintained if there be a sufficient market at home and abroad for American goods. Production in South America may continue but cannot be further developed unless financial assistance be obtained.

At the present time steamships are available and sailing regularly from this country to the principal ports of Latin-America and from those ports to the United States. Many of these vessels are unable to obtain full cargoes. Although only a limited number are under the United States flag, the above will clearly indicate to exporters, importers and manufacturers that they need not hold back from entering the field on this account.

Before trade can resume its normal course, the exchange problem must be solved, either by the restoration of old, or by the establishment of new, credit facilities.

New Credit Machinery Needed.

Old methods may no longer be serviceable in the situation which will result from the readjustment following the war. It should now be possible indeed, in the mutual interest of the Latin-American Republics and ourselves, to create new credit machinery to perform the functions of the old, and which will at the same time rid us, at least partially, of a dependence upon the London credits and European financial markets which, though essential in the past, has proved to be seriously embarrassing.

Deprived of the European loans with which their resources were being developed, Latin-American countries are now undergoing a serious curtailment of industry and development. The consequences in many instances will be serious, not only to these countries themselves but also to the countries which expected to supply the materials.

It has been increasingly the practice of European bankers to stipulate the use of European material in the projects which they financed. Latin-America is now turning to the United States for funds. This country is hardly in a position to undertake considerable investments at the present time, *but industries with an already considerable trade at stake may well consider the necessity of protecting that trade by obtaining for their customers some relief from the present stringency. Such investments, if judiciously made, would yield an ultimate fair return and meanwhile provide a market for American materials which cannot now be sold.*

The question of creating a market for Latin-American securities in the United States, therefore, is highly important. The development of our trade with those countries is largely dependent on its satisfactory solution.

Establishment of Commercial Credits Most Important.

Unless the restriction of commercial credits be remedied, however, we will not only be unable to extend our trade but we will lose a considerable portion of that which we already have.

The present effort to secure co-operation of American bankers in massing a gold fund to satisfy our obligations abroad by promising to cause London exchange again to approach normal, will lessen to the American importer the expense of liquidating in London his South American indebtedness. It will nevertheless give effect to the old alienatoin of the selling power we *should* derive from purchases of South American products. Liquidation of our South American indebtedness in London will pay for British exports to Latin-America, at a time when American merchandise, intimidated by moratoria, remains congested on our docks. Our available money will serve Great Britain's effort to capture South American markets vacated, perforce, by Germany.

Whenever there is a great disturbance of the world's finances, American exporters and importers in South American trade are injured because of their dependence on London. *This has happened four times in twenty-five years.*

So long as South America must meet interest settlements in London by shipment of goods to the United States, under the old three-cornered system, our South American trade must, to a certain degree, depend upon London exchange.

But in view of the facts above mentioned, it has seemed to your Committee that the need for independence, emphasized by the present situation, should be recognized. We feel that an attempt should now be made to evolve some plan whereby we might take advantage of our large direct trade with Latin-America to make a market for bills drawn in dollars, and establish a direct exchange, not with the view to eliminating sterling credits now or later, but in order to provide an exchange channel which will supplement, offset or compete with London, and be available in an emergency when London exchange is disorganized.

The maintenance of exchange relations depends on a credit machinery and reciprocal balances. This machinery will partially be provided under the Federal Reserve Act, which permits American banks to open branches abroad and permits a rediscount in this country of commercial paper, based on shipments of commodities in foreign trade. These steps, however, have not yet been effected, and your Committee appreciating that the installation of this machinery may require considerable time, has considered means for temporary relief.

Co-operative Exchange as Emergency Measure.

A plan for the establishment of a Merchants' "Co-operative Exchange," or clearing house, for Latin-American trade, has been proposed. This, it has been suggested, would enable importers and exporters of goods to and from Latin-America to watch credits, balances to be remitted on certain definite settling dates. The chief argument for such an institution is that it would bring together exporters and importers, among whom there is now no cohesion. Both know their cash requirements each month. If the exporters require say $5,000,000 to pay for their October shipments to Brazil and the importers a like amount to pay for their imports from Brazil, such an exchange might be able easily to liquidate transactions in New York.

The plan, however, is open to serious objection for the following reasons:

(1) The necessity and difficulty of securing the co-operation of a sufficient number of importers and exporters.

(2) The necessity and difficulty of standardizing credits.

(3) The difficulty of reaching an agreement as to the rate of exchange between South American currency and United States dollars.

(4) The difficulty due to the seasonal variations of shipments of South American produce and the consequent fluctuation in the demand for balances in New York or South America.

(5) The disorganized financial situation in South America, which increases the risk in securing settlements in the South American republics.

(6) The necessity of creating and maintaining an expert, and, therefore, expensive organization.

The difficulty as regards South America, however, would still remain, for it would be impossible within any reasonable time to organize in the principal cities of South America sufficiently extensive co-operative associations of importers and exporters of American products.

Standardization of South American credits, therefore, could only be secured by the guarantee of American shippers or importers, or by the guarantee of the South American Governments themselves.

Your Committee, therefore, after careful consideration, feels that the suggested "co-operative exchange" would not be practical, although a powerful banking group or large banking institution willing to assist in maintaining and developing our Latin-American trade might be able to secure and render mutually beneficial the organized co-operation of exporters and importers in matching credits.

Recommendations.

Your Committee, however, believes that the extension of credits might be facilitated and some relief afforded, pending the establishment of the Federal Reserve Banks if, in addition to permitting national banks which have signified their intention to enter the Reserve Associations, to accept commercial paper, action be taken by the Federal Reserve Board to make immediately effective the rediscount provision of the new banking system, thus assuring early establishment of a discount market.

Your Committee, while appreciating the necessity of conserving the banking resources of this country for the protection of our domestic situation, nevertheless believes that the *cessation or curtailment of our trade with Latin-America will in itself be highly injurious to American industry*, just as we believe that *the extension of this trade would make for the prosperity of the country at large*, as well as of those directly interested. We therefore hope that American banking institutions may be induced to meet the present emergency, not by tentative and inadequate measures, but by extending accommodation sufficient at least to assure the maintenance of our already established trade.

Extension of Trade.

The question of extending American commerce with Latin-America depends primarily, as does the problem of maintaining our trade, upon the establishment of commercial credits, upon our ability to finance Latin-American enterprise, purchase the products of its soil and industries and upon the perfection of our selling machinery.

Your Committee has not attempted to formulate suggestions as to the manner in which the individual manufacturer should proceed to establish a market for his products in South America. Nor does it here dwell upon the importance of adaptation of the product to the needs of the market or proper packing.

Caution Now Advisable.

Your Committee feels, however, that merchants and manufacturers now contemplating an entry into the Latin-American

field should be careful to avail themselves of the easily accessible information concerning these markets. It is suggested that they should, at the outset, remember that the cost of maintaining individual representatives would probably be too great for any one of them to bear themselves. It is therefore suggested that associations consisting of the smaller firms or corporations engaged in kindred lines of production might be formed, and that either one or more representatives should be sent to South America to look after the interests of such associations, thereby bringing the cost of representation within a reasonable limit.

It has been suggested that American manufacturers should combine to send to South America trade exhibits, showing the various articles which they have for sale. Your Committee, however, is not inclined to feel that such measures would be productive of any permanent results. It is suggested instead that manufacturers and dealers desiring to place their products in Latin-America, and who, for any reason, prefer not to send their own representatives there, could establish connections with export houses already doing business in those countries and maintaining large branch offices in the principal South American cities fully equipped with efficient sales organizations or who have established connections, and in certain lines of goods—foodstuffs, notions, and miscellaneous articles—join in establishing what might be called for want of a better name an "American Store," in certain of the most important cities.

Ventures of this sort, however, require considerable capital and experienced men, and for the sake of the ultimate development of mutually beneficial commercial relations with Latin-America it is believed that our merchants and manufacturers should not attempt to instal their own establishments in Latin-America unless they are prepared to meet initial losses and disappointments before realizing even moderate profits in what must necessarily be a developing, rather than a ready made business.

HANDICAP IN THE NATION'S TRADE.

Heavy Charge for Replacement of Fire Losses Must be Provided For.

In the competition of nations for the trade of the world, any condition which would prove a handicap must be carefully considered, the causes investigated and every possible endeavor made to secure either their absolute removal or a reduction to the minimum.

Canada, in her present efforts toward obtaining a share of the export trade of Germany, suffers from one of the most serious difficulties with which a nation can contend, namely, that of heavy fire loss.

In the commercial world three items make up the cost of every article, viz., raw material, labor and overhead charges. Raw material is governed in price by market conditions. Overhead charges, however, are a factor of expense which is always open to investigation. The charge against the output of a nation consists of a great many individual items of expense; prominent among these is the cost of replacing property destroyed by fire. Canada had a fire loss in 1913 of $26,346,618 or $3.29 per capita. The Census Branch allows approximately five persons to a family, and, on this basis, the head of every family in Canada must provide $16.45 to pay his share of this expense. Using the Census figures of 575,203 as the number of employees engaged in manufacturing in Canada, and assuming that each of these represents a family of five persons, Canadian manufacturers paid out, in 1913, no less than $8,475,089.00 to provide for replacement of property destroyed by fire.

Germany, on the other hand, has a per capita fire loss of .33, with a family unit loss of $1.65, and, on the basis of the number of Canadian manufacturing employees, she pays out $651,075. In other words, Canada and Germany working side by side, and with the same number of employees, Canadian manufacturers must provide, in wages alone, for an additional overhead expense of $7,824,014.00 to cover fire loss before Canada can compete with her opposition on an equal footing, all other conditions being approximately the same.—*Conservation.*

WAR PRICES IN CANADA.

The effects of two months of the world's war on Canadian prices are summed up in a rise of the Labor Department's index number from 135.5 as calculated at the end of July to 140.7 as worked out at the end of September. These numbers are percentages of the general level of prices in the decade 1890-1899 and are based on quotations from 272 articles scattered over the whole field of production and consumption.

Most of the rise took place during the three weeks following the declaration of war. In fact the last half of September saw general steadiness and even a tendency to decline in important articles like grains and cattle.

Though a rise of five points in the Departmental index number is very marked it is not without precedent. Canadian prices during the trade boom of 1912 went up at intervals with almost equal rapidity, and the readjustment of prices at the close of 1911 sent the index number up four points in a single month.

It has also to be remembered that several articles which have contributed very materially to sending the index number up during the last month are not of first importance in consumption. For example, cream of tartar, antimony, and quicksilver have all more than doubled, while a number of other secondary commodities (alcohol, solder, sulphur, etc.), went up by twenty, thirty and forty per cent. Tin and rubber went up very rapidly in August, but declined practically just as fast in September. Flour is perhaps the most important food stuff that has shown a tendency to decline. A full analysis of the prices movement by groups of commodities is appearing in the current issue of the "Labour Gazette."

Retail prices, of which the Department is receiving quotations for over thirty articles in every town of 10,000 and upwards in Canada, have been on the whole steady in September after the first upward movement following the war. In flour and sugar further advances occurred in most of the cities, but in other commodities prices were quiet. Rents were downward in some fifteen localities throughout the Dominion.

It is interesting to note that in England the Economist's index number went up six per cent. during August, the rise being greatest in foodstuffs and least in minerals, while the Statist's index number went up from eighty-two at the end of July to eighty-seven at the end of August. Bradstreet's index number for the United States went up twelve per cent. in August, but has eased off slightly since. The crest of the high prices wave seems to have come about two or three weeks after the declaration of war.

J. J. Blow, Importer and Manufacturer, 104, High Holborn, London, W.C., has written to "Industrial Canada" stating that he is handling cutlery and building trade supplies for Canadian manufacturers. He says: "There should be a great future for anything manufactured in your country suited to the home trade."

WE MUST LEARN TO IMPROVE MANUFACTURING.

With respect to the general progress of conservation ideas, it must be remembered that, in the last resort, the highest degree of conservation depends upon the efficiency of the human unit. . . . The greatest need of Canada to-day from the standpoint of its material development, is a higher degree of agricultural and technical education.—*From address of Hon. Clifford Sifton, at fifth annual meeting of Commission of Conservation.*

Within a generation of living men, Germany's sun has risen above the horizon, and has blazoned forth, as it is rising toward the zenith, with a splendor that compels our admiration, even though it may fill us with alarm. . . It was to education, thorough and far-reaching, that their wise counsellors looked for the means whereby their nation should regain and enhance its position in the world, and the faith and hope which inspired them have, as we all know too well, been more than justified.—*Dr. Reynolds, at Imperial Education Conference.*

AUSTRALIAN MARKET.

Boswell and Company, manufacturers' representatives, 51 York St., Sydney, N.S.W., states that there is a good market in Australia for cheap steel enameled baths, sinks, conduit tubings for electrical purposes, electric fans, heaters and any other kindred lines.

They offer to act for Canadian manufacturers on a commission basis. They say that "Canadian goods are held in highest esteem and, all things being equal, they are received in preference to foreign manufactures."

BRITAIN SHOULD BUILD FACTORIES IN CANADA.

Regarding the campaign in Great Britain to obtain German trade in Canada, Mr. Reid, the agent general for Ontario in London, has issued the following statement in the Old Country:—

There has always been a preference for British goods in Ontario, and if German merchants have secured a solid position in the markets it is principally due to their enterprise in taking pains to study the particular requirements of those markets. Ontario is the leading manufacturing province of the Dominion, and is responsible for practically half of the manufacturing trade of Canada, yet the province is a big importer, the imports and exports during the fiscal year ended 31st March, 1913, being as follows: Imports, $301,651,328; exports, $132,756,532. Practically every article manufactured in Canada is manufactured in Ontario. Continual development of the manufacturing industry is due in no small part to the hydro-electric system, brought into force by the present Government under the chairmanship of Sir Adam Beck, and the availability of cheap power has acted as a tremendous stimulus to all kinds of industrial activity. The goods principally imported from Germany are clocks, clock cases, hosiery, laces, drugs and chemicals, fancy goods, cutlery, iron and steel tyres, manufactures of zinc, wrapping paper, shawls, underclothing and cloth fabrics. There is plenty of room in Ontario for the manufacture of clocks, hosiery, laces, cutlery, drugs and chemicals. British manufacturers should bear in mind that the manufacturers of the United States have, during recent years, been making strenuous efforts to capture the Canadian trade. No less than 230 branches of United States industrial concerns were located in Canada last year. The British manufacturer should remember that though there is a decided preference for British-made goods there is a still greater preference for British goods made in Canada, and it is undoubtedly a point to be taken into careful consideration that in the long run the best plan is to start a branch factory in the province.

A HOPEFUL OUTLOOK.

American bankers stand ready to pay their obligations to Britain in cash. The $100,000,000 gold pool already formed and $80,000,000 raised by a New York syndicate to meet New York city's obligations probably will suffice to satisfy Britain. Payment of this total may not be necessary.

SUGAR BARRED FROM BRITAIN.

The British Government has prohibited the importation of sugar into the United Kingdom, with the object of preventing German and Austrian sugar reaching here from neutral countries.

CATALOGUES TO TRADE COMMISSIONERS.

Mr. D. H. Ross, Trade Commissioner, Melbourne, Australia, urges that Canadian Manufacturers forward their catalogues to Australian trade officials, accompanied by price lists and discount sheets.

TRADE AGENCY IN SOUTH AFRICA.

The formation of a Canadian Trade Association for the purpose of substituting Canadian manufactures for goods hitherto imported into South Africa is advocated by Mr. R. R. V. Jeffreys, A.M.I.M.E., P.O. Box 105, Buluwayo, Rhodesia, South Africa.

Mr. Jeffreys offers his services as an agent for Canadian manufactures in South Africa and invites communications. His references seem to be very satisfactory.

SOUTH AFRICAN IMPORTS FROM GERMANY AND AUSTRIA.

An excellent analysis of German and Austrian imports into South Africa is made in Weekly Report No. 560 of the Department of Trade and Commerce, by Mr. W. J. Egan, Canadian Trade Commissioner at Cape Town. In 1913 Germany sold $17,000,000 worth of manufactured goods in South Africa. Among the articles mentioned in Mr. Egan's report are: Apparel and slops, cartridges, guns, gunpowder, asbestos, baskets, beads, brushes, clocks, corks, piece goods, blankets, shawls, hosiery, drugs, cable wire, enamelware, confectionery, condensed milk, sugar, canned goods, picture frames, furniture, bottles, glassware, gloves, haberdashery and millinery, axles, bolts, cutlery, fencing, wire, nails, stoves, tools, hose, agricultural implements, musical instruments, iron and steel, bars, bolts, rods, girders, lamps, boots and shoes, leather goods, machinery, belting, pumps, paints, paper, phonographs, plate and silverware, railway equipment, forges, instruments, tents, tinware, toys, fancy goods, vehicles, motors and cloth.

A further list of goods needed to replace German manufactures contains the following items: Wrought iron water and gas tubing, edged tools, blow lamps, electric irons, wrought iron hollow ware, sash tools, enamelled ware, conduit tubing and fittings, composition brushing for electrical purposes. Full particulars should be given as to terms, prices, discounts and catalogues should be forwarded.

ARTICLES NEEDED BY CANADIAN MANUFACTURERS AS A RESULT OF THE WAR

CAN YOU SUPPLY THEM?

IN reply to a circular issued by INDUSTRIAL CANADA to Canadian manufacturers asking them to state for publication the articles used by them, the supply of which has been cut off or reduced by the war, the following information has been received. Those who have the specified articles for sale should communicate directly with the manufacturers mentioned.

ACETATE OF SODA
The Imperial Varnish & Color Co., Ltd., Toronto.

ALBUMIN FROM EGGS (Soluble Scales)
Stone Limited, Toronto.

ALUM
The E. B. Eddy Co., Ltd., Hull.

ALUMINUM
Decalcomania Co. of Can., Ltd., Toronto.

AMMONIUM BICHROMATE (Crystals)
Stone Limited, Toronto.

ANILINE EOSINE
The Imperial Varnish & Color Co., Ltd., Toronto.

ASBESTOS BOARD (Compressed in sheets from about 40″x80″ and 1-5″ thick)
A. B. Ormsby Co., Ltd., Toronto.

BAGS, Jute, or Substitutes for
Geo. H. Gillespie & Co., Ltd., Madoc, Ont.

BALE CLOTH
Stauntons Limited, Toronto.

BARIUM CHLORIDE
The Imperial Varnish & Color Co., Ltd. Toronto.
Colin McArthur & Company, Montreal, Que.

BARYTES, White (Free from Iron)
Colin McArthur & Co., Montreal.

BETA NAPHTHOL
The Imperial Varnish & Color Co., Ltd. Toronto.

BISULPHIDE OF CARBON
The Standard Paint Co. of Can., Ltd., Montreal.

BLEACHING POWDER
The E. B. Eddy Co., Ltd., Hull.

BOILER TUBES
Marsh & Henthorn, Limited, Belleville, Ont.

BOTTLES, Glass, for Ale and Stout
John Labatt, Ltd., London, Ont.

BRAID, Hemp, Bleached and Dyed.
J. R. Shuttleworth & Son, London, Ont.

BRAID, Straw, Bleached and Dyed
Excelsior Straw Works, St. Johns, Que.
J. R. Shuttleworth & Son, London, Ont.

BREWERS' PITCH
John Labatt, Ltd., London, Ont.

BURLAP
Stauntons Limited, Toronto.

CALCINED MAGNESITE
Interior Construction Co., Ltd., Winnipeg.

CARBOLIC ACID CRYSTALS
Colin McArthur & Company, Montreal.

CHINA CLAY
R. Campbells' Sons, Hamilton, Ont.
The E. B. Eddy Co., Ltd., Hull, Que.

CHINA, Plain Undecorated
Glass & China Decorators, Ltd., Montreal.

CHINA, Special Shapes & Forms
Sterling Rubber Co., Ltd., Guelph, Ont.

CHLORATE OF POTASH, Powdered
The E. B. Eddy Co., Ltd., Hull, Que.

CHLORIDE OF LIME (26% Chlorine)
Sultana, Ltd., Montreal, Que.

CHLORIDE OF MAGNESIA
Interior Construction Co., Ltd., Winnipeg.

CHROMIC ACID
Stone Limited, Toronto.

CITRIC ACID
Imperial Cocoa & Spice Co., Ltd., Hamilton.
Pure Gold Mfg. Co., Limited, Toronto.

CLAY, Ball
R. Campbells' Sons, Hamilton, Ont.

CLAY, Raw
R. Campbells' Sons, Hamilton.

CLOTH, Serge
Fraser Cap Co., London, Ont.

CLOTH, Tweed
Fraser Cap Co., London, Ont.
Merritt & Company, Chatham, Ont.

COLORS
The E. B. Eddy Co., Ltd., Hull, Que.
Imperial Cocoa & Spice Co., Limited, Hamilton, Ont.

COLORS, Artist
Stone Limited, Toronto.

COLORS, Lithographing
Stone, Limited, Toronto.

COTTON PIECE GOODS
H. P. Ritchie & Company, Toronto.

COUMARIN
Canadian Cocoanut Company, Montreal, Que.
Imperial Cocoa & Spice Co., Ltd., Hamilton, Ont.
Puddington, Wetmore, Morrison, Ltd., St. John, N.B.
Pure Gold Mfg. Co., Ltd., Toronto, Ont.

CREAM OF TARTAR CRYSTALS
Pure Gold Mfg. Co., Ltd., Toronto.

CYANIDE OF POTASSIUM
Hamilton Stove & Heater Co., Hamilton.

DEGRAS OR WOOL GREASE
The Standard Paint Co. of Can., Ltd., Montreal.

DEXTRINE
The E. B. Eddy Co., Ltd., Hull, Que.
Granby Elastic Co., Ltd., Granby, Que.

DYES
The E. B. Eddy Co., Ltd., Hull, Que.

DYES, Aniline
Robert Crean & Co., Ltd., Toronto, Ont.
The D. Hibner Furniture Co., Ltd., Berlin, Ont.
Colin McArthur & Company, Montreal, Que.
Reliance Ink Company, Winnipeg, Man.
Stauntons Limited, Toronto, Ont.

DYES, Red Lake
The Imperial Varnish & Color Co., Ltd. Toronto.

DYES, Scarlet
The Imperial Varnish & Color Co., Ltd., Toronto.

DYESTUFFS
Colonial Weaving Co., Peterborough

ETHERS
Imperial Cocoa & Spice Co., Ltd., Hamilton, Ont.

EYES (for Wax Figures)
Dale Wax Figure Co., Ltd., Toronto.

FELDSPAR
R. Campbells' Sons, Hamilton.

FELT, Table Tops
Hourd & Co., London, Ont.

FLINT
R. Campbells' Sons, Hamilton.

FELT, Pressed
Fraser Cap Co., London, Ont.

FIBRE, Hard
John T. Hepburn, Limited, Toronto.

FURRIER'S SUPPLIES (Glass Eyes, Rubber Snouts, Claws, Papier Maché Heads)
Holt, Renfrew & Co., Ltd., Toronto.

GALLIC
Reliance Ink Co., Winnipeg, Man.

GALLIC ACID
Stone Limited, Toronto.

GELATINE
Imperial Cocoa & Spice Co., Ltd., Hamilton.

GLASS
Puttyless Window Co., Lennoxville, Que.

GLASS PLATES, for washboard rubbing purposes, corrugated
Taylor, Scott & Co., Ltd., Palmerston, Ont.

GLASS, Ground, Coarse and Fine
The E. B. Eddy Co., Ltd., Hull, Que.

GLASS, Plate
Stone Limited, Toronto.

GLASS, Sheet
The D. Hibner Furniture Co., Ltd., Berlin, Ont.

GLASSWARE, Flint
Glass & China Decorators, Ltd., Montreal.

GLUE
E. B. Eddy Co., Ltd., Hull, Que.

GOLD LEAF, Imitation used in the manufacture of transfers
Decalcomania Co. of Can., Ltd., Toronto.

GUM
Granby Elastic Web Co., Ltd., Granby, Que.

GUM ARABIC
The E. B. Eddy Co., Ltd., Hull, Que.

GUM COPAL
The E. B. Eddy Co., Ltd., Hull, Que.

GUM DAMAR
The E. B. Eddy Co., Ltd., Hull, Que.

GUM TRAGACANTH
The E. B. Eddy Co., Ltd., Hull.
John Labatt, Ltd., London, Ont.

HANGERS
John Labatt, Ltd., London, Ont.

HARDWARE, Furniture
Nelson & Foster, Ltd., Winnipeg, Man.

HAT BANDS, Silk and Cotton
Robert Crean & Co., Ltd., Toronto, Ont.
Excelsior Straw Works, St. Johns, Que.
J. R. Shuttleworth & Son, London, Ont.

HAT LININGS
Excelsior Straw Works, St. Johns, Que.

HAT TOPS
Excelsior Straw Works, St. Johns, Que.

HAT TRIMMINGS
Excelsior Straw Works, St. Johns, Que.

INK, Printing
The E. B. Eddy Co., Ltd., Hull, Que.

IRON OXIDE
The E. B. Eddy Co., Ltd., Hull, Que.

KNIVES, Advertising
John Labatt, Ltd., London, Ont.

KRAFT PULP
The E. B. Eddy Co., Ltd., Hull.

LEAD
R. Campbells' Sons, Hamilton.

LEAD PENCILS
Stone Limited, Toronto.

LINEN CANVAS
Toronto Pad Co., Ltd., Toronto.

LINSEED OIL
The E. B. Eddy Co., Ltd., Hull.

LIQUID LITHO
Stone Limited, Toronto.

LUMBER, Ash (1" to 2" Thick, Length 12' to 16')
Merritt & Company Chatham, Ont.

LUMBER, Elm Soft (in the log)
Merritt & Company, Stratford, Ont.

LUMBER, Hickory (1⅛" to 2" Thick, Length 12 to 14')
Merritt & Company, Chatham, Ont.

LUMBER, Oak (1" to 2" Thick, Length 12' to 16')
Merritt & Company, Chatham, Ont.

MANGANESE DIOXIDE
Dominion Glass Co., Ltd., Montreal.

MIRROR PLATE GLASS
The D. Hibner Furniture Co., Ltd., Berlin, Ont.

MURIATE OF POTASH
Farmers & Dairymen's Association, Clifton, N.B.

NITRATE OF SODA
Imperial Varnish & Color Co., Ltd., Toronto.

ORTHONITROPARATOLUDINE
The Imperial Varnish & Color Co., Ltd., Toronto.

OXIDE OF CHROMIUM
The Standard Paint Co. of Can., Ltd., Montreal.

OXIDE, Red
Standard Paint Co. of Can., Ltd., Montreal.

PAPER, Fancy, Colored
Stauntons Limited, Toronto.

PAPER, Glazed, for covering paper boxes
H. T. Reason & Company, London, Ont.

PAPER, Heavy, White and Tinted
Stauntons Limited, Toronto.

PAPER, Oatmeal
Staunton's Limited, Toronto.

PAPER, Pure Vegetable Parchment
H. T. Reason & Company, London, Ont.

PAPER, Transfer
Stone Limited, Toronto.

PARANITRANILINE
The Imperial Varnish & Color Co., Ltd., Toronto.

PHOSPHORIC ACID (Glacial)
Stone Limited, Toronto.

PHOSPHORUS
The E. B. Eddy Co., Ltd., Hull, Que.

PLUSH (Similar to Hatters' Plush)
Merritt & Company Chatham, Ont.

PORCELAIN (for Knitting Machines and Winders)
Creelman Brothers, Georgetown, Ont.

PRUSSIATE OF POTASH (for case hardening)
Brown Boggs Co., Ltd., Hamilton.

PRUSSIATE OF POTASH
The Imperial Varnish & Color Co., Ltd., Toronto.

PERMANGANATE OF SODIUM
Hamon & Hess, Montreal.

REEDS, Flat and Oval
C. P. Gelenis & Tiere, Three Rivers, Que.

RESIN
The E. B. Eddy Co., Ltd., Hull, Que.

ROCK PULVERIZERS
Farmers' and Dairymen's Association, Clifton, N.B.

SILK FOR LINING
Holt, Renfrew & Co., Toronto.

SODIUM OF PERMANGANATE
Hamon & Hess, Montreal.

STEEL WOOL
Brown Boggs Co., Ltd., Hamilton, Ont.

SUGAR OF LEAD, White
Colin McArthur & Company, Montreal.

SULPHATE OF POTASH
Farmers' and Dairymen's Association, Clifton, N.B.

SULPHUR
The E. B. Eddy Co., Ltd., Hull, Que.

SULPHUR, Liver of
Hamilton Stove & Heater Co., Hamilton, Ont.

TANNIC ACID
Reliance Ink Co., Winnipeg, Man.

TARTARIC ACID
Imperial Cocoa & Spice Co., Ltd., Hamilton.

TEETH (for Wax Figures)
Dale Wax Figure Co., Ltd., Toronto.

THORIUM NITRATE (used in manufacturing of mantels)
Auer Incandescent Light Mfg. Co., Ltd., Montreal, Que.

TIN
R. Campbells' Sons, Hamilton.

TRAYS
John Labatt, Ltd., London, Ont.

TUSCHE
Stone Limited, Toronto.

TWINE
Stauntons Limited, Toronto.

UMBER
R. Campbell's Sons, Hamilton.

UPHOLSTERING MATERIAL
Nelson & Foster, Ltd., Winnipeg, Man.

VANILLIN
Canadian Cocoanut Company Montreal, Que.
Imperial Cocoa & Spice Co., Ltd., Hamilton, Ont.
Puddington, Wetmore, Morrison, Ltd., St. John, N.B.

WAFER SHEETS (for Caramels and Nougat)
Canadian Cocoanut Company, Montreal.

WOOD FLOUR
Curtis & Harvey (Canada), Ltd., Montreal.

YARN
H. P. Ritchie & Co., Toronto.

ZINC
The E. B. Eddy Co., Ltd., Hull, Que.

ZINC OXIDES
R. Campbells' Sons, Hamilton.
The E. B. Eddy Co., Ltd., Hull, Que.

ZINC PLATES
Stone Limited, Toronto.

ARTICLES CANADIAN MANUFACTURERS HAVE FOR SALE AS A RESULT OF THE WAR

INDUSTRIAL CANADA publishes the following articles, the importation of which has been affected by the war, and also articles which may be substituted for materials cut off by the war, with the names of firms in Canada having such articles for sale. Please communicate directly with the firms mentioned.

ALUMINUM PRODUCTS
Northern Aluminum Co., Ltd., Toronto.

BELTING, High Waisted
Canada Label & Webbing Co., Ltd., Toronto.

BITS
McKinnon Dash Co., St. Catharines, Ont.

BLANKETS, Horse
Toronto Carpet Mfg. Co., Ltd., Toronto.

BOILERS
International Engineering Works, Amherst, N.S.
Marsh & Henthorn, Ltd., Belleville, Ont.

BOTTLE TOPS
Reliance Ink Co., Ltd., Winnipeg.

BRASS AND METAL PRODUCTS
The Tallman Brass & Metal Co., Hamilton.

CALCINED MAGNESITE
Canadian Carbonate Co., Ltd., Montreal.

CASTINGS
John T. Hepburn, Limited, Toronto.

CASTINGS, Grey Iron
International Engineering Works, Amherst, N.S.
Marsh & Henthorn, Ltd., Belleville, Ont.

CEMENT, Non-staining, Hydraulic
Sydney Cement Co. Ltd., Sydney, N.S.

CHAIN BLOCKS
The Herbert Morris Crane & Hoist Co., Toronto.

CHINA, Hand Painted
Glass & China Decorators, Ltd., Montreal.

CIGAR FILLER
J. M. Fortier, Ltd., Montreal.

CIGAR MAKERS' SUPPLIES
J. M. Fortier, Ltd., Montreal.

COLORS, Dry, for Paint, Printing Ink
Allan Munro Color Co., Ltd., Montreal.

CONGOLEUM (Substitute for Linoleum)
Paterson Mfg. Co., Montreal.

CRANE CHAIN
The Herbert Morris Crane & Hoist Co., Toronto.

CRANES
The Herbert Morris Crane & Hoist Co., Toronto.

CYANIDES, Crude from Cyanamid
American Cyanamid Co., Niagara Falls, Ont.

DECORATING ON GLASS, CHINA AND EARTHENWARE
Glass & China Decorators, Ltd., Montreal.

DERRICKS
International Engineering Works, Amherst, N.S.
Marsh & Henthorn, Ltd., Belleville, Ont.
John T. Hepburn, Limited, Toronto.

DIES, Chrome Steel
Canada Forge Company, Welland, Ont.

DYES (Substitute for the use of Pulp and Paper concerns, Wallpaper and Rubber Manufacturers)
The Allan Munro Color Co., Ltd., Montreal, Que.

EMBROIDERIES
H. P. Ritchie & Co., 38 Clifford St., Toronto.

ENGINES
International Engineering Works, Amherst, N.S.
Marsh & Henthorn, Ltd., Belleville.

FELT, Carpet and Saturated
Rowland Ford & Son, Portneuf Station, Que.

FLOWERS, Artificial
T. D. Wardlaw, 23 Scott St., Toronto.

FORGINGS
Dominion Stamping Co., Ltd., Walkerville.
Nova Scotia Steel Co., New Glasgow, N.S.

FORGINGS (heretofore bought from Krupps)
Canada Forge Company, Welland, Ont.

FORGINGS, Locomotive
The Canada Forge Company, Welland, Ont.

GLOVES, Rubber, Surgeons and Electricians
Sterling Rubber Company, Guelph, Ont.

GLUE, Liquid Fish
The Maritime Fish Corporation, Ltd., Montreal, Que.

GRANITE
Bay of Fundy Red Granite Works, St. George, N.B.

GREASE CUPS, Brass Compression
Canadian Winkley Co., Ltd., Windsor, Ont.

GREASE CUPS, Steel Compression
Canadian Winkley Co., Ltd., Windsor, Ont.

HACKSAW BLADES
Victor Saw Works, Hamilton.

HARNESS, Transport
McKinnon Dash Co., St. Catharines.

HARNESS TRIMMINGS, Artillery
McKinnon Dash Company, St. Catharines, Ont.

HOOKS
The Herbert Morris Crane & Hoist Co., Toronto.

JACKS, Lifting
The Herbert Morris Crane & Hoist Co., Toronto, Ont.

LABELS, Woven
Colonial Weaving Co., Ltd., Peterborough, Ont.

LACES, Net Top
H. P. Ritchie & Co., 38 Clifford St., Toronto.

LIMESTONE, Ground (used to make Potash Soluble)
Eastern Lime Company, Sydney, N.S.

LUMBER, Basswood Export
The John Carew Lumber Co., Ltd., Lindsay, Ont.

LUMBER, Elm Export
The John Carew Lumber Co., Ltd., Lindsay, Ont.

MACHINERY, Hoisting
International Engineering Works, Amherst, N.S.
Marsh & Henthorn, Ltd., Belleville, Ont.

MACHINERY, Tinsmiths' and Sheet Metal Workers'
Brown Boggs Co., Ltd., Hamilton.

METAL SPECIALTIES, Stamped
Reliance Ink Co., Ltd., Winnipeg.

METAL PRODUCTS
Canadian Car & Foundry Co., Ltd., Montreal.

MOULDINGS
A. B. Ormsby Co., Ltd., Toronto.

PAPER
Rowland Ford & Son, Portneuf Station, Que.

PAPER, Cheap Bond Papers, both in White and Colors
Canada Paper Company, Toronto.

PAPER, Colored Specialties
Canada Paper Company, Toronto.

PAPER, High Grade Colored Fibrestock Covers
Canada Paper Company, Toronto.

PAPER, Oatmeal
The Canada Paper Company, Toronto.

PAPER, Waxed, Printed or Plain
British American Wax Paper Co., Ltd., Toronto, Ont.

POTATO FLOUR
H. D. McEwen, Morell, P.E.I.

POTATO STARCH
H. D. McEwen, Morell, P.E.I.

PRESSES, Foot and Power (for Sheet Metal Stamping)
Brown Boggs Co., Ltd., Hamilton.

RAILWAY FASTENINGS, such as Fish Plates, Bolts, Nuts and Spikes
Nova Scotia Steel Co., New Glasgow, N.S.

RESINATE (Cobalt)
Imperial Varnish & Color Company, Toronto.

RESINATE (Manganese)
Imperial Varnish & Color Co., Ltd., Toronto.

ROPE
The Herbert Morris Crane & Hoist Co., Toronto.

ROPE BLOCKS
The Herbert Morris Crane & Hoist Co., Toronto.

SADDLE ARCHES
Dominion Stamping Co., Ltd., Walkerville.
McKinnon Dash Company, St. Catharines, Ont.

SADDLE TREES
Dominion Stamping Co., Ltd., Walkerville, Ont.
McKinnon Dash Co., St. Catharines.

SHAFTING, Cold, Compressed, Polished
Nova Scotia Steel Co., New Glasgow, N.S.

SHEET METAL GOODS
Dominion Stamping Co., Ltd., Walkerville.

SHIP'S BOTTOM COMPOSITION
The Martin-Senour Co., Ltd., Montreal.

SHOES FOR STAMP MILLS
Canada Forge Company, Welland.

SILVER DEPOSIT WARE
Glass & China Decorators, Ltd., Montreal.

SLINGS
The Herbert Morris Crane & Hoist Co., Toronto.

SOAP, Castile
Richards Pure Soap Co., Ltd., Woodstock, Ont.

SOAP, Glycerine
Richards Pure Soap Co., Ltd., Woodstock, Ont.

STAND PIPES
Chicago Bridge & Iron Works, Bridgeburg, Ont.

STEEL BARS, Rolled, such as Rounds, Squares, Angles and Special Sections
Nova Scotia Steel Co., New Glasgow, N.S.

STEEL SECTIONS, Cold Rolled
A. B. Ormsby Co., Ltd., Toronto.

STEEL SHEETS AND PLATES
Nova Scotia Steel Co., New Glasgow, N.S.

STIRRUPS
McKinnon Dash Co., St. Catharines, Ont.

SWEATERS
Toronto Carpet Mfg. Co., Ltd., Toronto.

TALC
Geo. H. Gillespie & Co., Ltd., Madoc, Ont.

TANKS, Water Elevated Steel
Chicago Bridge & Iron Works, Bridgeburg, Ont.

TAPES
Canada Label and Webbing Co., Ltd., Toronto.

TIN SPECIALTIES, Stamped
Reliance Ink Co., Ltd., Winnipeg.

TOOLS, Sheet Metal Workers'
The Brown Boggs Co., Ltd., Hamilton, Ont.

TOOLS, Tinsmiths'
The Brown Boggs Co., Ltd., Hamilton, Ont.

TOY BALOONS
Sterling Rubber Company, Guelph, Ont.

TRANSFERS
Decalcomania Co. of Can., Ltd., Toronto.

TUBING, for Beds
Standard Tube & Fence Co., Ltd., Woodstock, Ont.

TWINES
Doon Twines, Ltd., Doon, Ont.

WEBBING
Colonial Weaving Co., Ltd., Peterborough, Ont.

WEBBING, Narrow
Canada Label & Webbing Co., Ltd., Toronto.

WOOD PRODUCTS
Canadian Car & Foundry Co., Ltd., Montreal.

WOOL, Raw
H. V. Andrews, 32 Church St., Toronto.

STRAWBOARD, MILLBOARD AND WOOD PULP BOARD.

By J. E. Roy, Canadian Trade Commissioner at Birmingham, England.

The above articles are imported by Great Britain in large quantities, and the market is one to which Canada should devote more attention. Imports of strawboard in 1913 were valued at £978,334, of which £950,712 were accounted for by purchases from the Netherlands. Imports from Germany were valued at £18,328.

Purchases of millboard and wood pulpboard amounted to £665,977 last year, the main source of supply being Sweden—£188,963; with Russia second in importance—£167,694. Imports from Germany have more than doubled during the last five years, the values being in 1909, £55,632 and in 1913, £120,456. Canadian manufacturers should endeavor to enhance their sales in the United Kingdom. Very gratifying progress has already been made by Canada in recent years, her sales having advanced from £56,948 in 1909 to £104,161 last year.

Any quotations and samples that may be forwarded will be placed before British importers.

Nails, Screws, Rivets, Bolts and Nuts.

Inquiries are to hand for nails, screws, rivets, bolts and nuts. Wire nails have been hitherto purchased from Germany in large quantities, the value last year being £196,711. The supply from Belgium which approximates £235,000 annually, is also curtailed at present. The United States is also a source of supply, the purchases from that country in 1913 amounting to £64,693.

The main source of supply of iron nails, screws and rivets in 1913 was the United States, the value being £30,261, an increase of £15,779 over 1909. Imports from Germany were valued at £20,177. Purchases from British possessions amounted to £373 only, out of a total import of £125,036.

The United States is also the chief source of bolt and nut supplies, the value in 1913 being £61,912 out of the total import of £132,502. Purchases from Germany last year were valued at £22,950, and from Belgium, £35,139.

United States lithographers anticipate that "Printed in Germany," a well-known slogan on post cards, fine calendars and other printed novelties, will be less in evidence after the conclusion of the war, if the work now under way to wrest this trade away from the Germans is successful.

The National Association of Employing Lithographers has started a campaign to urge United States lithographers, of whom about 80 per cent. are members of the association, to enter the lines of trade controlled by the Germans.

SOUTH AFRICAN AGENCY.

Mr. T. J. Armstrong, Johannesburg, South Africa, wishes to get into communication with manufacturers of engineering and mining supplies. He states that he has 20 years experience and good connections with the principal buyers and consulting engineers in South Africa.

UNITED STATES PRINTERS WANT DUTY REMOVED ON ADVERTISING MATTER ENTERING CANADA

Yet They Make no Mention of Abolishing Their Own Duties. Taking Canadian Business from Canadian Firms is the Object.

"THERE is no country in the world that can duplicate American catalogue work."

This is the modest statement made in a letter published by the *Iron Age*, one of the leading publications of the United States. We can forgive the natural exuberance which seizes any manufacturer when he surveys his own product, but such a universal claim of superiority is in itself an indication of weakness. The letter follows:

"*To the Editor*:—Our friends across the border have found it necessary to charge duty on American advertising matter and have issued regulations according to which stamps in various denominations can be bought from the Commissioner of Customs at Ottawa for prepayment of this duty. A similar tax on advertising matter has been enforced for quite some time in Australia, New Zealand and South Africa, but we never dreamed of such a tax being imposed by our neighbors on this continent. We are wondering what American manufacturers think of this method of promoting business between the two countries, and we would very much like to hear the opinion of other manufacturers in the United States using the mails for distribution of catalogues and advertising matter.

"We have heard that the reason why Australia, New Zealand and South Africa resorted to such a reactionary method is that typographers' unions throughout these countries had in mind that literature advertising foreign products should be printed in the various countries instead of being imported free of duty, and perhaps it was also for the purpose of protecting the colonial industries.

"Aside from a very small revenue, we fail to see what benefit Canadian manufacturers or printers are going to derive from it, as we hardly believe there is any United States manufacturer who would send his advertising material to foreign countries to be printed, particularly as there is no country in the world that can duplicate American catalogue work.

"The duty simply imposes upon the American manufacturers unnecessary red tape, and, if anything, would have a tendency to create ill feeling between manufacturers in the United States and their Canadian customers, because if advertising matter should happen to be mailed without prepaying the duty, we understand that "merchandise" of this kind would be presented to the addressee for acceptance against a payment of duty levied on each parcel, and if not accepted to be returned to the sender, causing delay and unpleasantness.

"Sometimes such catalogues or printed matter have been requested by Canadian manufacturers, and while American manufacturers are willing to pay the duty, the matter will from time to time escape attention, simply because it is something out of the ordinary. The levying of this duty, therefore, is of a highly problematic value to our Canadian friends, while to American manufacturers it is nothing but unnecessary hardship. Finally, is it really consistent with modern ideas of promoting friendly intercourse between nations to take such steps? What if the United States took reprisals?

"EXPORTERS."

Those who hold the above views seem to be unaware that the United States charges duty on Canadian advertising matter, and it would therefore seem inconsistent that Canadians should be asked to abolish the duty charged on United States advertising matter. Moreover, the United States throws other obstacles in the way of Canadian exporters, one of which is consular invoices, for which a fee is charged, while United States manufacturers can send their goods into Canada without any such trouble or expense.

Canadians intend to foster home industry, a policy which has been pursued to much greater lengths in the United States than in Canada. In 1910 we had 773 paper and printing industries, capitalized at $62,000,000, employing 22,894 persons, paying $10,866,721 in wages, and spending $16,956,697 for raw materials. These figures can now be increased by 20 per cent. Yet we are asked to strike off the duty on advertising matter and allow its free entry from the United States, in spite of the fact that Canadian printers are required to pay from 15 to 35 per cent. duty on their raw material, and to encounter all sorts of Customs restrictions if they venture into the United States markets with their products.

There are no fewer than seventy-five large printing firms in Canada which are members of the Canadian Manufacturers Association, and it is safe to say that Canadians can produce catalogues which are not surpassed by the best work of United States publishers.

The real explanation of the above letter is that United States printers have been losing some of their best business in Canada because Canadian manufacturers and other business men have discovered that Canadian printers can turn out catalogues and other advertising matter of such quality and at such prices that it is no longer necessary to send the work to United States printers. Consequently, since they are unable to meet the competition of Canadian printers under the existing rates of duty, the United States printers have begun an agitation which they vainly hope will result in the abolition or lowering of the Canadian duty.

WOOL SALES CANCELLED.

The wool sales scheduled to take place in Christchurch, N.Z., on November 12, have been abandoned, and it is stated that the holding of other New Zealand sales for November is doubtful. Melbourne brokers have also decided not to hold any wool sales in Australia until sales have been held in London.

EMBARGO ON ANILINES RAISED.

A London report, dated October 2, states that the embargo on the export of aniline dyes from Great Britain to neutral countries has been raised.

TRANSPORTATION

By J. E. WALSH

CANADIAN MERCHANDISE IMPORTED INTO HOLLAND.

MR. J. T. Lithgow, Canadian Trade Commissioner at Rotterdam, has informed the Department as to a circular issued by the management of the Holland-American Line to Dutch importers of American merchandise, and which applies equally to all merchandise of Canadian origin. This circular reads in parts as follows:—

"Shippers must hand to our agents in New York a declaration certified by the British and French consuls in New York, to the effect that the goods in question are for consumption in the Netherlands."

Importers in Holland will also be required to make the following declaration:—

"That the goods are exclusively for consumption in the Netherlands, that goods will be entered by consignees for home use only and not for re-exportation."

Import Rates.

As you are undoubtedly aware, shortly after the outbreak of the war, through import rates from points in Great Britain and the Continent were suspended.

Supplements to the various tariffs have been received restoring the rates from London, Liverpool, Manchester and Bristol, England, and Glasgow, Scotland; also Hull, Middlesboro, Newcastle-on-Tyne, Southampton, England, and Leith, Scotland, to Fort William, Port Arthur, Westfort, Ont., and points west thereof as shown in C. P. R. tariffs Nos. E-415, E-1939, E-1982 and E-2013, and G. T. R. tariffs Nos. I-128 and I-131. The following arbitraries should be added to the rates shown in the above-mentioned tariffs:—

Governed by Canadian Freight Classification.

1	2	3	4	5	6-10	CLASSES
30	25	20	15	12	10	Cents per 100 lbs.
27/6	23/-	18/3	13/9	11/-	9/3	per 2240 lbs. Sterling.

EXCEPTIONS:—The following commodities will take *additional* rates shown below:—

	Cents Per 100 lbs.	Sterling Per 2240 lbs.
Baskets	$1 00	91/9
Calcium Chloride	03	2/9
Cotton Piece Goods	20	18/3
Dry Goods, N. O. S.	60	55/
Enamelled ware, N. O. S., in boxes	60	55/
Enamelled ware, nested, crated or b'x'd	30	27/6
Fancy Goods	1 00	91/9
Glassware (common)	40	36/9
Hosiery	60	55/
Hats and Caps	60	55/
Millinery	1 00	91/9
Soda Ash, Caustic, Sal and Silicate	03	2/9

On all other commodities add the Class Rates shown above to the Commodity Rates in the tariffs.

Rates published in tariff and supplements will not apply requiring refrigeration service on the ocean.

Change in Steamship Service Halifax to West Indies.

The Royal Mail Steam Packet Company, Pickford & Black, Agents at Halifax, advise that S.S. "Chaleur" sailing from Halifax on the 6th November will omit Montserrat, Dominigo, St. Lucia and St. Vincent on the southbound voyage, and will call at these ports on the northbound voyage. This arrangement will be maintained alternately.

Export—Via Vancouver.

The export class rates to points in the Orient, including Auckland, N.Z., and Sydney, Australia, via Vancouver will be changed to the following basis which is the same as ordered by the Board of Railway Commissioners on shipments to Vancouver for local delivery:—

Governed by Canadian Classification.

Classes—1 (*a*) 365, 2 (*r*) 310, 3 (*r*) 245, 4 (*r*) 200, 5 (*r*) 175, 6 (*r*) 160 cents per 100 lbs.

(*a*) Indicates advance. Effective Nov. 21.
(*r*) Indicates reduction. Effective Oct. 26.

International Rates—Five Per Cent. Advance Case.

The Canadian Railways have issued supplements and new tariffs, effective November 16th, 1914, advancing the rates from Toronto to Point Edward, inclusive, and south thereof in Canada to points in what is known as Central Freight Association territory, which is, roughly speaking—Chicago and St. Louis to Pittsburg and Buffalo and north of the Ohio River. The advance is being made in sympathy with the recent Order of the Interstate Commerce Commission in what is known as the Five Per Cent. Advance Case, although that body only allowed the advance in rates between points in United States Central Freight Association territory.

The following are a few of the numbers of the Supplements and Tariffs containing the advanced rates:

G.T.R.—Supplement 15 to G B F-4.
Supplement 10 to B-7.
Tariff C F-273.
Tariff C G-78.
Tariff C U-92.
Tariff V-61.
Tariff V-62.

There are other tariffs being issued advancing rates, but up to date they have not come to hand.

Members affected should get in touch with their local agents with a view of determining just how they will be affected.

Your attention is called to the following Circulars, issued by the Canadian Pacific Railway Company:—

COLD STORAGE FACILITIES AT ST. JOHN, N.B.

To Shippers, Agents and Connecting Lines,—

Your attention is called to the Cold Storage Warehouse facilities for apples and other perishable commodities offered by the New Brunswick Cold Storage Company, Limited, St.

John, N.B., as set forth in their circulars which have been distributed from time to time.

The warehouse is modern in every respect, and has direct track connection with the Canadian Pacific Railway. It is the only Cold Storage Company having track connection located at a Canadian winter port, i.e., St. John or Halifax.

All communications and inquiries in regard to these warehouse facilities, either for general storage or storage in transit, should be addressed to the New Brunswick Cold Storage Company, Limited, St. John, N.B.

Freight for Dominion Atlantic Railway Points.

Circular No. E. 566 was issued June 6th, 1911, pointing out the fact that service had been established and through rates published to Halifax and Truro, and other points on the Dominion Atlantic Railway, via St. John and Digby.

Traffic via this route is not increasing the way it should if shippers and consignees were being actively canvassed.

Tariffs E. 1545, E. 1634, and E. 1798, contain through rates to Dominion Atlantic points, including Halifax and Truro, and also to Halifax and southwestern points, and package freight via this route can be handled with despatch.

Rates include Marine Insurance between St. John and Digby, and it is important, therefore, that correct values be shown in all cases on waybills.

All concerned should be instructed to see that this route is advertised and business solicited actively.

Rules for Shipping to South America.

The following are some of the Rules which should be adhered to in making shipments for export to South America:

Containers should be of good quality and strong, as they are subject to rough handling and pilferage, but with a minimum of weight as duty is ordinarily charged on the gross package weight.

Second-hand boxes should never be used.

Requests should be made that all orders show special shipping instructions, and same should be carried out to the letter.

All packages should be stencilled.

Gross and Net weight shown, as most countries require this.

Name of steamer on which goods are shipped shown on two adjacent sides.

Consignor's or shipper's name should be less conspicuous than that of consignee, as otherwise confusion is apt to result entailing delays.

Documents.

Consular documents should be made out in Spanish, except to Brazil, where Portuguese should be used.

As the Metric System is used in South America all weights and measures should be so stated on Consular documents.

At least three Bills of Lading must be made out and certified by Consuls of countries to which goods are consigned.

To Brazil six copies of Bills of Lading are required.

Close of Navigation.

The railways advise, Effective Nov. 23, 1914, with close of navigation, shipments via Montreal and Quebec for export will be suspended.

CANADIAN STEAMSHIP SAILINGS TO FOREIGN PORTS IN NOVEMBER.

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, November 25; from Victoria, *Makura*, November 25.

To Melbourne, Sydney—The New Zealand Shipping Company: From Montreal, *Daldorch*, November, 1914.

British West Indies.

To Bermuda, St. Kitts, Antigua, Barbados, Grenada, Trinidad and Demerara—Royal Mail Steam Packet Company: From Halifax, *Chaudiere*, November 6; from St. John, *Chaleur*, November 22.

To Bermuda, St. Kitts, Antigua, Montserrat, Dominica, St. Lucia, St. Vincent, Barbados, Grenada, Trinidad and Demarara—Royal Mail Steam Packet Company: From St. John, *Caraquet*, November 8; from Halifax, *Caraquet*, November 20. To Santiago, Cuba, and Jamaica—Pickford & Black Line: *Amanda*, November 26. To Turks Island, Santiago, Cuba, and Jamaica—Pickford & Black Line: *Anita*, November 12.

China.

To Hong Kong—Blue Funnel Line: From Victoria, *Talthybius*, October 28.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, November 25; from Victoria, *Makura*, November 25.

Great Britain.

To Bristol—Canadian Northern Steamships, Ltd.: From Montreal, *Royal Edward*, November 3; *Royal George*, November 17.

To Glasgow—Blue Funnel Line: From Victoria, *Talthybius*, October 28.

To Hull—Furness Withy & Co., Ltd.: From Montreal, *Cotswold Range*, early November.

To Liverpool—Blue Funnel Line: From Victoria, *Talthybius*, October 28.

To London—Blue Funnel Line: From Victoria, *Talthybius*, October 28.

To Manchester—Manchester Liners, Ltd.: From Montreal, *Manchester Merchant*, November 7; *Manchester Commerce*, November 14; *Manchester Shippers*, November 21.

Hawaii.

To Honolulu—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, November 25; from Victoria. *Makura*, November 25.

Japan.

To Yokohama, Kobe—Blue Funnel Line: From Victoria, *Talthybius*, October 28.

New Zealand.

To Auckland—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, November 25; from Victoria, *Makura*, November 25.

To Auckland, Wellington, Lyttleton, Dunedin—The New Zealand Shipping Company: From Montreal, *Daldorch*. November, 1914.

INSVRANCE

THE Equity Fire Insurance Company has given notice that it will apply to the Treasury Board on October 31st, 1914, for the release of securities deposited with the Receiver General. Any policyholder of the company opposing such release must file a statement of their opposition on or before that date. It is understood that, in order to defray outstanding claims and expenses, a call will have to be made on shareholders of the Company to the extent of at least twenty-five per cent. of the uncalled capital. Holders of Equity policies are again advised to make sure that the liability under such policies has actually been taken over by the National-Ben Franklin Fire Insurance Company.

Insuring With the Enemy.

In the Royal Proclamation issued on August 5, relating to Trading with the Enemy, there is a clause dealing with insurance, warning "All persons resident, carrying on business, or being in Our Dominion," not "to make or enter into any new marine, life, fire, or other policy or contract of insurance with or for the benefit of any person resident, carrying on business or being in the said Empire (i.e., the German Empire), nor under any existing policy or contract of insurance to make any payment to or for the benefit of any such person in respect of any loss due to the belligerent action of His Majesty's forces or of those of any ally of His Majesty."

Taking Care of Soldiers.

An excellent method of showing appreciation of the services of those who have gone to the front with the Canadian contingent has been adopted by numerous municipalities in insuring the lives of volunteers from their respective cities. This is a very practical form of assistance which will in many cases repair the omission of those who have others dependent on them, but who have neglected to provide against the death of the breadwinner. The majority of companies have generously decided not to demand any additional premium on policies covering volunteers which were in force prior to the commencement of the war but the additional premium of $50.00 per thousand, which life insurance companies are charging on new policies covering the lives of soldiers on active service, would seem, in the light of previous experience, to be quite justifiable. The following is taken from a bulletin issued by the Mutual Life Assurance Company of Canada:

"The British offices during the Boer war of 1899-1902 showed that about 8 per cent. of those soldiers who carried insurances and engaged in active service became claims on the companies. It would thus appear that if the Canadian offices are adequately to protect themselves, a heavy extra should be added to the premiums of those policyholders who engage in active service in the present war. Indeed, this conflict is likely to be much more fatal than any former war has been. However, it would be a terrible hardship if, having made the supreme sacrifice, our soldiers were obliged to pay a large additional premium for the protection of those they leave at home. The probability is that the class of men principally involved would consist of those who could not possibly pay such an extra. Thus they would be, so to speak, penalized for their patriotism.

"Taking this view of the matter, the company has decided through the executive to waive the extra on existing policies. The cost, though considerable, we know will be cheerfully borne by all our members."

What Canada Spends for Insurance.

During the year 1913 the money spent in Canada on the various forms of insurance amounted to $76,064,483. Of this sum life and fire insurance naturally accounted for the greater part, taking $41,062,793 and $25,745,947 respectively. The balance was divided among the remaining classes as follows:

Employers' Liability	$3,516,758
Personal Accident	2,199,885
Sickness	1,135,430
Guarantee	645,624
Hail, weather and tornado	447,682
Plate Glass	224,829
Steam Boiler	147,669
Inland Transportation	140,240
Live Stock	132,438
Burglary	75,580
Sprinkler Leakage	42,386
Title Insurance	351

Of the total premiums paid for all classes of insurance, Canadian companies received $36,171,259; British and Colonial Companies, $18,209,680, and American and foreign companies, $21,699,877.

Insurance Companies Suit in Illinois.

Insurance Superintendent Potts, of Illinois, has filed anti-trust suits against 133 fire insurance companies in that State, charging them with having formed a combination to prevent competition, in restraint of trade and for the purpose of fixing the price of fire insurance. In a similar case commenced in 1902, it was alleged that the companies had combined and conspired to prevent competition and fix rates, and a decree was finally entered in 1908 by which the companies were perpetually enjoined from continuing such an agreement. Superintendent Potts charges that the companies, through an ostensible transfer of their rate-making organization, turned over all their facilities and equipment to the Illinois Inspection Bureau, which now fixes the premiums charged by the parties to the combine. It is alleged, however, that the salaries of the employees of this bureau are paid by contributions from the companies, and that its affairs are controlled by a committee composed of company officials. The State is divided into several districts, the Bureau having a "stamping office" in each territory. It is charged that policies are mailed to these offices in the respective districts and there examined and that if the rates do not conform to the agreed rates, the company is notified and required, under penalties, to re-write the policy at the rate fixed by the Bureau or cancel it. It is also claimed that the Committee, under certain conditions allows lower rates for the purpose of meeting competition with mutual insurance companies and Lloyds, which are termed "relief" rates, and are made for the purpose of driving out competitors and maintaining a monopoly. A decree is asked determining the entire question of companies engaging in any scheme to fix rates and summoning the companies and employees of the Bureau to give details of the agreements whereby the Committee is able to compel the members and their agents to observe fixed rates.

TARIFF

By J. R. BRISTOL

THE following decisions were isued by the Board of Customs after its meeting in Ottawa on Tuesday the 13th inst. These decisions are effective from the 13th inst., viz.:—

"Ingle" grate stove (per illustration) and "Mayflower" open front heater (per illustration) declared to be dutiable under tariff item 451. These are stoves on legs and stand out from the wall, not being built into the wall as in the case of fire places and the like.

Rolled band steel, per sample, for use on gang machines for cutting stone or marble, declared to be dutiable under tariff item 378.

Viscose bottle tops (sample) declared to be dutiable under tariff item 711.

Jippi Jappa hats, made from Torquilla Paja Palm (per sample), unfinished, unblocked and unbleached, declared to be free, under tariff item 639.

Advertising wrappers (per sample) for Wrigley's Chewing Gum, declared to be dutiable under tariff item 178.

Departmental Rulings.

Correction—Appraisers' Bulletin 630, page 14, "Feldspar, crushed, item 711" SHOULD READ "item 296."

Special or Dumping Duty.

Metalcrete—consisting of finely pulverized iron filings, designed for hardening concrete floors and the like, declared to be subject to special or dumping duty.

Exports from Canada into Holland.

Mr. J. T. Lithgow, Canadian Trade Commissioner at Rotterdam, has informed the Department of Trade and Commerce of a circular (issued by the Holland American Steamship Line to Dutch Importers) whose terms Canadian shippers should observe. This circular reads in part as follows:—

"Shippers must hand to our agents in New York a declaration certified by the British and French Consuls in New York, to the effect that the goods in question are for consumption in the Netherlands."

Importers in Holland will also be required to make the following declaration:—

"That the goods are exclusively for consumption in the Netherlands; that goods will be entered by consignees for home use only and not for re-exportation."

Exports to South Africa.

Organs of Canadian manufacture should find a good market in South Africa according to the report to the Department of Trade and Commerce of Mr. W. J. Egan, Canadian Trade Commissioner, Capetown, Mr. Egan states that:—

"Under regular trading conditions, many inquiries were made for Canadian organs, with present conditions, therefore an effort should be made by Canadians to secure a larger share of this trade.

"There are a good number of the higher-priced instruments sold here and a large trade is done in organs which retail from $75 to $150. The bulk of trade, however, is done in organs retailing from $40 to $65. In this class a showy instrument with as large a number of stops as possible is required. A list of South African firms making inquiry during the past year may be secured from the Department of Trade and Commerce, Ottawa."

Germany, last year, exported into South Africa musical instruments to the value of $620,000.

The South African Customs Tariff on organs from Germany is 15 per cent. ad valorem; on organs of Canadian manufacture the customs tariff is 12 per cent. ad val., subject to prescribed evidence of origin on invoices.

September Trade.

In September, 1914, importations of dutiable goods amounted in value to $22,575,997; in September, 1913, to $37,997,562. The importations of free goods for the same period were:—

1914—$13,991,575.
1913— 16,342,995.

The total importations including coin and bullion were, (September):—

1914—$52,452,793.
1913— 54,545,319.

The total exports from Canada in the month of September were:—

1914—$40,898,545.
1913— 41,119,779.

The principal exports of domestic produce compare as follows:—

	Sept., 1913.	Sept., 1914.
The Mine	$6,402,080	$5,120,246
The Fisheries	1,881,166	1,987,669
The Forest	5,347,458	4,945,471
Animals and their produce	6,540,720	7,063,312
Agriculture	11,829,772	7,478,798
Manufactures	5,041,465	5,188,314

The total exports for the six months ending September compare as follows:—

1913—$211,072,542.
1914— 220,296,771.

CAN WE MANUFACTURE THESE?

The following articles are not manufactured in Canada, says the Department of Trade and Commerce, Ottawa:

Acid salicylic; agasote mill board; air rifles; asbestos pipe coverings; carbons, electric light; carpenters' tool bags of grass; copper tubing, seamless; galvanized wire netting, 14 x 15 gauge; galvanized wire netting, any gauge, ¾ mesh and smaller; grass carpet.

Lead pencils, wood; miniature elecric incandescent lamps; moving picture machines; pipe coverings of cork for cold storage insulation; rolled edged steel plates; safety fuses, not metallic; salicylate of soda; seamless steel boiler tubes; oil engines.

Sewing machines, straw hat; sheet copper and seamless copper tubing; sheets, Bessemer; slag trucks; sockets, incandescent, for street lamps, 1½-inch inside diameter and over; steam steering engines for equipment of ships; steel squares; store fronts, copper holders designed for holding plate glass in store fronts; strychnine, alkaloid and sulphate of; telephone carbon protector blocks, carbon discs and gloss lenses used in manufacture of telephones; tubing, seamless steel; unloaded dry shells; wads, gun.

LEGISLATION

By F. W. WEGENAST

WORKMEN'S COMPENSATION IN ONTARIO.

EMPLOYERS throughout the Province are now beginning to realize what a stupendous task lies before the Workmen's Compensation Board in administering the system which is to go into operation on the 1st of January. There is probably not a single employer in the Province who has not within the last few weeks been obliged to wrestle with one or more of the following questions:—

What about the office staff? Do the stenographers, accountants, etc., come under the Act? What if they are in the same building as the rest of the plant? What if they are on other premises just as dangerous? What if they are on premises not so dangerous? What about the manager? What if he rarely, or never, goes into the plant? What if he does go into the plant? What about the president, directors, etc., of an incorporated company? What if the president, directors, stenographers, office boys, etc., etc., are generally, or sometimes, engaged in work other than "clerical"?

Meaning of "Clerical."

What does "clerical" mean? Does it mean what the dictionary says, namely, "of, pertaining to, or characteristic of, the clergy, or a clergyman; suitable for the clergy; of or relating to a clerk or copyist"? Does it include salesmen and saleswomen who are commonly called "clerks" in this country? Does it include persons engaged in handling goods in a warehouse establishment? Does it include the man whose "clerical" work consists solely in signing cheques? Does it include shipping clerks?

What about the commercial travellers? Are these engaged in "clerical" work? Are they "exposed to the hazards incident to the nature of the work carried on in the employment"? Is the hazard of travelling by rail or steamboat one of the hazards "incident to the nature of the work carried on in the employment"?

What about employees not exposed to the hazards "incident to the nature of the work carried on in the employment" but not engaged in "clerical" work? What about needlewomen, seamstresses, milliners, dressmakers, cooks and table waiters?

Branch Establishments.

What about branch establishments? The Act provides that "employment shall include employment in any industry or any part, branch or department of an industry." What if a manufacturer has a wholesale or retail department or branch either on the manufacturing premises or elsewhere? What about branches outside the Province; employees injured outside the Province are in some cases entitled to compensation? Does this support the view that branches or departments outside the Province are under the Act?

As to persons engaged in "clerical" work and not "exposed to the hazards incident to the nature of the work carried on in the employment," it must be observed that the two qualifications must occur before the person is excluded from the Act. The work must not only be "clerical" but the employee must not be exposed to the hazard, and conversely, the employee must not only not be exposed to the hazard but the work must be "clerical."

The meaning of the word "clerical," that is to say, the legislative meaning—the meaning which the legislature (not the Retail Merchants' Association, or the drafting Commissioner or even the Cabinet) intended—is presumed to be the ordinary or dictionary meaning unless the contrary is shown. The root meaning referring to the clergy has been extended to cover matters generally connected with copying or writing, but it would be difficult if not impossible to maintain that a correct use of the word would include the salesmen, saleswomen, floor walkers, office and messenger boys, porters, janitors, sweepers, scrubwomen and the indefinite variety of persons engaged for instance in a large department store or a wholesale warehouse.

One of the many anomalies of the Act is that those persons who are excluded from the Act by reason of their being engaged in "clerical work" are in a worse position than they were before the Act was passed. Under the former law these persons were largely under the old Workmen's Compensation Act, but this Act is now repealed and the rights of "clerical" workers will depend strictly upon the common law. Can it be supposed that the Legislature meant to deprive the employees of mercantile establishments, wholesale or retail, of their rights under the older Workmen's Compensation Act?

Who Will Answer These Questions?

It is simply impossible to answer these questions, nor will any ruling of the Workmen's Compensation Board determine them. The question whether a porter or an elevator man or a floor walker in a retail store is entitled to an action for damages will be decided by the courts, and, as the law stands it will be necessary that scores and hundreds of points be decided finally by the Privy Council before it is known whether this or that class of workman is entitled to compensation and whether the Board ought to collect premiums from this or that class of workman. The Board may indeed rule whole classes in or out of the Act, but it is safe to conjecture that its power will be sparingly exercised. The whole situation is ridiculous and humiliating in the extreme. The exigencies of a supposed political situation made it appear wise to Government and Opposition to place upon the statute book the heterogeneous and complex mass of provisions which constitute the Act. Even with the exercise of the greatest legislative care and skill the task of organization and administration would have been immense. Instead of making the work as easy as possible the Legislature has thrown upon the administering board the onus of deciding, under conditions as difficult as it is possible to make them, questions of acute political significance which the legislators themselves were afraid or unable to face.

Result of Exclusion From Pay Roll.

One piece of advice to manufacturers is generally pertinent. Where there is any doubt the workman should be left off the pay-roll reported to the Board. The question whether the workman is entitled to compensation or not does not depend upon whether the premium has been collected or not. The payment of the premium will not insure the workman nor will the non-payment of the premium leave him uninsured. The only effect of ruling the workman off the reported pay-roll is to keep the money in the employer's pocket. If all employers followed the same rule and included, for instance, their commercial travellers no hardship

would result, but some will be sure to leave off their travellers, therefore, it will be inequitable if others include them.

Practically all the difficulties that have arisen were anticipated and brought to the attention of the Government before the Act was passed. Many of them are of equal interest to employers and workmen, some involve hardship for workmen alone.

However, the Act must be administered. The Board is not to blame for the folly of the Legislature. The exercise of the greatest good faith and good nature is the obvious duty of every employer in the Province, and sooner or later the Legislature will make up its mind and express it plainly on the questions with which the employers and the Board will in the meantime have to wrestle as best they can.

PROVINCIAL LICENSES NO LONGER NEEDED BY MANUFACTURING AND COMMERCIAL COMPANIES

Privy Council Decides that Dominion Charters are Sufficient

MANUFACTURERS and other commercial companies operating in Canada who are well advised will henceforth take out Dominion Charters and ignore Provincial Licensing Acts, as a result of the decision of the Privy Council in the cases of John Deere Plow Company v. Duck and Wharton v. John Deere Plow Company.

The John Deere Plow Company was incorporated under a Dominion charter, with head office in Winnipeg, and authorized to carry on business in agricultural implements throughout Canada. The case of the Company v. Duck was an action for breach of contract to accept delivery of certain implements Duck had ordered but afterwards refused to take, alleging that the Company, having no license in British Columbia, could not proceed against him. The Company claimed that its Dominion Charter was all that was necessary to enable it to carry on business in any province. The case of Wharton was a friendly action asking for injunction to restrain the Company from carrying on business in British Columbia on the ground that such business would be illegal because the Company was not licensed.

Both cases were tried before Mr. Justice Gregory, of the Supreme Court of British Columbia, and decided against the Company. Leave was asked and granted to appeal direct to the Privy Council. The case was argued in July, the Company being represented by Mr. F. W. Wegenast; the respondents, by Mr. Eugene LeFleur, K.C., Montreal; the Dominion Government, by Mr. E. L. Newcombe, K.C., Deputy Minister of Justice, and Mr. Raymond Asquith; and the Province of British Columbia, by Sir Robert Findlay, K.C., and Mr. Jeffrey Lawrence.

Broad Effect of Decision.

In the light of the Privy Council's decision manufacturers and other commercial companies will be able to carry on business in the various Provinces of Canada by taking out a Dominion charter only. The judgment is very sweeping in its treatment and ascribes the invalidity of the British Columbia Act to the fact that it interferes with the powers conferred upon the company by the Dominion Parliament and with the Company's status in the courts. The judgment applies equally to the extra-Provincial licensing and registration in Ontario, Manitoba, Alberta, Saskatchewan, New Brunswick, Nova Scotia and the Yukon. The Act of the Province of Quebec specifically excepts Dominion Companies and is therefore unaffected. The Act of Prince Edward Island is of different character and is also unaffected.

Associated Press Report of Case.

The Association was advised by cable on October 26th that the Company's appeal had been allowed and the judgment will follow by mail. The Canadian Associated Press cable despatch from London reads as follows:

"An important judgment, involving the company law in Canada, was delivered by the Privy Council to-day in the consolidated appeals from the British Columbia Supreme Court in John Deere Plow Company v. Theodore Wharton and Garnett Duck, with the Attorney-General for the Province and the Dominion as intervening appellant. The company was incorporated in 1907 by letters patent issued under the Companies Act of the Dominion. The letters patent purported to authorize it to carry on throughout Canada the business of a dealer in agricultural implements.

"It has been held by the court below that certain provisions of the British Columbia Companies Act have been validly enacted by the Provincial Legislature. These provisions prohibit the companies which have not been incorporated under the law of the Province from taking proceedings in the courts of the Province in respect of contracts made within the Province in the course of their business unless licensed under the Provincial Companies Act. They also impose penalties on the company and its agents if, not having obtained a license, it or they carry on a company's business in the Province. The appellant was refused a license by the Registrar. It was said that there was already a company registered in the Province under the same name, and section 16 of the Provincial statute prohibits the granting of a license in such a case.

"The question which has to be determined is whether the legislation of the Province which imposed these prohibitions was valid under the British North America Act.

"What their Lordships have to decide is whether it was competent to the Province to legislate so as to interfere with the carrying on of business in the Province of a Dominion company.

Dominion Power Exclusive.

"Under the circumstances stated the distribution of powers under the British North America Act, said the Privy Council, the interpretation of which is raised by this appeal, has been often discussed before the Judicial Committee and tribunals of Canada, and certain principles are now well settled. The general power conferred on the Dominion by section 91, to make laws for the peace, order and good government of Canada, extends in terms only to matters not coming within the classes of subjects assigned by an Act exclusively to the Legislatures of the Provinces, but if the subject matter falls within any of the heads of section 92 it becomes necessary to see whether it also falls within any of the enumerated heads of section 91, for, if so, by the concluding words of that section it is excluded from the powers conferred by section 92.

"Turning to the appeal before them, the first observation their Lordships make is that the power of the Provincial Legislature to make laws in relation to matters coming within

the class of subjects forming No. 11 of section 92, the incorporation of companies with Provincial objects, cannot extend to a company such as the appellant company, the objects of which are not Provincial, nor is this defect of power aided by the power given by No. 13, on property and civil rights. Unless these two heads are read disjunctively the limitation in No. 11 would be nugatory. The expression, "civil rights in the Province," is a very wide one, extending, if interpreted literally, to much of the field of the other heads of section 92, and also to much of the field of section 91, but the expression cannot be so interpreted, and it must be regarded as excluding cases expressly dealt with elsewhere in the two sections, notwithstanding the generality of the words. If this be so, then the power of legislating with reference to the incorporation of companies with other than Provincial objects must belong exclusively to the Dominion Parliament, for the matter is one not coming within the classes of subjects assigned exclusively to the Legislatures of the Provinces, within the meaning of the initial words of section 91, and may be properly regarded as a matter affecting the Dominion generally and covered by the expression, "the peace, order and good government of Canada."

Status of Company.

"It follows from these premises that these provisions of the Companies Act of British Columbia which are relied on in the present case as compelling the appellant companies to obtain a Provincial license of the kind about which the controversy has arisen or to be registered in the Province as the condition of exercising its powers or of suing in the courts are inoperative for these purposes. The question is not one of enactment of laws affecting the general public in the Province and relating to the civil rights or taxation or administration of justice; it is in reality whether the Province can interfere with the status and corporate capacity of a Dominion Company in so far as that status and capacity carries with it the powers conferred by the Parliament of Canada to carry on business in every part of the Dominion. Their Lordships are of opinion that this question must be answered in the negative. They think the legislation in question really strikes at the capacities which are natural and logical consequences of incorporation by the Dominion Government of companies with other than Provincial objects.

Minor Action Remitted.

"These appeals are allowed and judgment entered for the appellant company in the action of Wharton v. John Deere Plow Company, with costs. The action by the company against the respondent, Duck, must, unless the parties come to an agreement, be remitted to the court below to be disposed of in accordance with the result of this appeal. As to the interveners, the Attorney-General of the Dominion and the Attorney-General of the Province, there will be no order. As regards the costs, the respondents, Wharton and Duck, must pay the costs of the appellant company's appeal, excepting so far as these have been increased by intervention."

OPPORTUNITIES FOR NEW INDUSTRIES AS A RESULT OF THE WAR

J. R. SHUTTLEWORTH & Sons, London, Ont., state the need of a plant in Canada for the bleaching and dying of straw and hemp braids for use in the manufacture of hats and for the manufacture of silk and cotton hand bands.

Opportunity for Potash.

A shortage of potash exists owing to the interruption of imports from Germany, according to the Sydney Cement Company. The Company claims that many of our soils have a good supply of potash, available only to a limited extent because it is insoluble and that the application of ground limestone will give conditions which will render potash soluble.

Substitutes for German Steel.

The A. B. Ormsby Co., Limited, Toronto, state that there have been imported from German mills through agents in Montreal and New York large quantities of hot rolled steel sections for use in the building of steel cornices for exterior and interior, steel stair risers and stringers, hand rails for stairs and balconies, steel sections for balustrades, newel posts, steel jambs, steel trims. The Company say that they are in a position to substitute, for all of this material steel, cold rolled steel sections and mouldings in any design and in any gauge up to No. 11, which is equal to one-eighth inch in thickness.

Crude Cyanides from Cyanide.

Before the end of the year the American Cyanide Company, of Niagara Falls, Ontario, expect to make crude cyanides from cyanide. These cyanides will have the same effectiveness per unit of nitrogen as potassium cyanide of 100 to 125 per cent. They are necessary for the reduction of ores. The processes have been heretofore controlled in Germany.

Substitutes for Imported Rubber Goods.

The Sterling Rubber Company, Limited, of Guelph, state that they are making rubber balloons in three different colors and surgeons' and electricians' rubber gloves since the war. The Company are also prepared to make any article of high-grade rubber or rubber goods formerly imported from Germany or Austria.

Boiler Tubes Wanted.

Marsh & Henthorn, Limited, Belleville, inform INDUSTRIAL CANADA that large quantities of boiler tubes are needed in Canada and express their belief that there is good opportunity for the establishment of a boiler tube factory, as tubes now used are practically all imported from the United States, Germany and Belgium.

Additions to Toronto Carpet Company's Output.

The Toronto Carpet Company, Toronto, inform INDUSTRIAL CANADA that they have altered their equipment to make cloth for horse-blanket lining suitable for army use, as well as linings for blankets.

Opportunity for Magnesia Manufacture.

The Interior Construction Company, Limited, Winnipeg inform INDUSTRIAL CANADA that they use several carloads of calcined magnesite and chloride of magnesia during the year and that from ten to twenty carloads are used in the city of Winnipeg. The Company believe that there is a good opportunity for a firm to manufacture this production in Canada, as magnesite is found in its natural form in Quebec. The Company state that they have to place an order for a 40,000-lb. car immediately, and up to the present have been unable to secure this material in Canada.

Sure of Our Monuments Anyway.

The Bay of Fundy Red Granite Works have written to INDUSTRIAL CANADA stating that United States firms are trying to substitute their granite for monuments formerly imported from Aberdeen. The Company state that New Brunswick has an unlimited supply of red, black and grey granite.

POSSIBILITIES OF FRENCH PURCHASES FROM CANADA

By HON. PHILLIPPE ROY

(*In Trade and Commerce Report No.* 561.)

CANADIAN dealers and industrial leaders should take the trouble of coming to France with all the necessary documents and full power to conclude transactions. They alone would be in a position to ascertain the needs, the character of goods demanded, delivery and payment conditions, and quote prices which would be profitable, but also equal to those which might be quoted by the United States. With respect to "tenders" called for by the French Government, it is customary that manufacturers should themselves forward them, comply with the specifications and call on the officers in charge of the contracts, obtain from them the prices previously quoted in former tenders and ascertain the quality of the goods.

With regard to orders from wholesale dealers, French custom also requires that the offers should be made verbally, subject to acceptance.

Whatever may be the positive or practical results thus secured by Canadian manufacturers or dealers—which it is impossible to foretell—they will at any rate have gained this great advantage of getting a better knowledge of the French market and starting connections which later on will bear profitable fruit. This has become all the more necessary now that, according to probabilities, the German market will be closed to Canada during some years and that this loss will have to be compensated by a gain in France. It may be added that from the financial standpoint the extension of commercial relations would facilitate the holding of the ground taken by Canadian securities on the French market, a feature which it is imperative not to neglect.

French Needs.

The necessities of war prevent the French Government from making known "*urbi et orbi*" certain needs pertaining to the state of war, such as those for rails, iron and steel for the repair or reconstruction of bridges, railway ties, etc. In these instances also the necessity is manifest to come on the ground to look into the matter direct. Should the Commissariat of Canada take any action, the risk would be run of appearing to be indiscreet.

Iron and Steel.

It is difficult to ascertain what are the resources of which France can dispose on this item. It is certain that the army has requisitioned all the metallurgical plants capable of manufacturing or repairing arms. Factories and labor are then lacking to turn out all that does not pertain to armaments.

It is a question as to what extent Great Britain will be in a position to fill the gap as regards raw metallurgical materials, in view of the fact that she has to look after her own requirements. Presently the North and Eastern railway companies will start to put their lines in shape, which have been seriously damaged by both armies. If it is doubtful that Canada could supply at the required time the rails needed in this manner, she could at any rate supply the reserve stock.

The same applies to iron and beams required for the quick repair of bridges destroyed throughout the northern districts. It is unnecessary to emphasize the necessity for a direct agreement in the case of such orders.

Important orders for horseshoes have been given in Pittsburg. It seems that Canada might make a bid in this line. The same is true of barbed wire, screws, nails, automobile spare parts, etc.

It might also be possible to come to an understanding with French metallurgical firms to fill the orders which they would have secured themselves.

Requirements of Lumber.

The constant repair of railway lines, following the withdrawal of the enemy, forces the north and east railway companies to utilize the new cross ties which they have had in stock for war purposes. Canada could participate in the replenishment of this stock, but on the formal condition of meeting the demands of the companies and delivering the ties prepared according to their wishes. Building timber in large quantities will be required by provincial cities which have been exposed to the calamities of war and which have to rebuild a great number of their buildings. Again in this case the habits of the building lumber dealers will have to be satisfied.

(Prices based on French measures, delivery French port.)

Dressed Leather and Hides.

French industry anticipates serious difficulties in meeting the demand for boots and shoes and leather goods. Switzerland, which in ordinary times exports to France a large quantity of boots, will probably be drawn upon by Germany and cannot supply both countries. Orders for harnesses, saddles, etc., may be secured. Sheep skins prepared to protect soldiers from cold during the winter campaign may also be sold.

Paper and Various Lines.

Good business seems possible in print paper, but it is needless to point out that there will be other bidders outside of Canada and that an expert alone could secure orders.

As regards other industries of less importance operating in Canada, it appears that the Boards of Trade should make a study of the articles sold by Germany to France and ascertain if it is possible for Canada to do any business in these lines. (Stationery, typewriting machines, etc.)

Food Products.

Canadian wheat is sufficiently known to make it unnecessary to draw the attention of dealers to this item; private interests will act by themselves. With respect to condensed milk, butter, cheese, it would certainly be interesting to investigate the French market and to seek direct exportation. This market would remain open after the war. At present ruling prices in France on milk products would not be profitable, but a rise must be considered probable as the whole cattle supply of the northern districts (Normandy, Picardy, Flanders, Champagne, Ardennes) is practically out of reckoning, having either been sold to the army or destroyed by the invasion.

Cattle.

It will be expedient to examine the possibility of shipping young cattle to restock the French herd, provided former mistakes are avoided. Exports of saddle and draught horses would surely find buyers.

Other foodstuffs, such as canned goods, biscuits, sugar, on which a rise is expected, would deserve special investigation.

Direct Action by Producers.

Consequently, a series of private trials would be desirable rather than a general commercial investigation. It would not be advisable that a Canadian committee, however well formed it might be, should come to France on an official visit similar to the trip made some years ago by the Canadian Manufacturers Association. The time is far from favorable for such a step and a campaign to impress public opinion is out of the question. Industrial managers and leaders must come privately and seek to obtain orders each for himself. They must bring with them all the necessary information, taking care beforehand to convert prices and measures to the French standard. A sort of scale prepared in advance for each industry will be necessary.

THE COMMERCIAL POSSIBILITIES OF RUSSIA

(*Trade and Commerce Report No.* 561.)

OF a total import amounting to $628,544,100 which crossed the European and Black Sea frontiers of Russia, over half, to the value of $348,855,640, came from the countries with which Russia is now at war (Germany and Austria-Hungary). A reference may be made to a statement of the Russian Minister of Foreign Affairs, M. Sazonoff, in which he points out the opportunity for British and American enterprise, resulting from the disablement of German trade with Russia. M. Sazonoff spoke in part as follows:

Statement of Russian Minister.

"There now exists a situation and an opportunity in trade and commerce with Russia which, to England and America, may mean more in the decades to come than it is easy to realize.

"It is the country which foresees the situation commercially in Russia that will reap the enormous benefits that the Russian markets now offer. It is not enough that merchants and manufacturers should offer their goods here. Experts should be sent here now, even while the war is still in progress, to study and examine the wants of our country.

"Our duties, our manner of doing business, and our present and future wants and growing demands should be studied scientifically so that, when peace comes, those channels which have for decades flowed deeply with German products may continue to flow with products from England and America.

"Russia opens opportunities for an industrial outlet such as can hardly be over-estimated. We have an empire of 170,000,000 souls, and the $300,000,000 we have been paying Germany yearly is but the beginning of a demand that will soon make Russia among the most desirable and valuable markets in the world."

Russian Commercial Expansion.

The significance of the above statement, coming from a source of such authority, will be apparent to observers conversant with the particulars of Russian industry and commerce. Russia has up to the outbreak of the war been undergoing a process of expansion and modernization which has reflected itself in a marked manner on the foreign trade of the country.

During the five years 1901 to 1905 the total annual foreign trade of Russia amounted to about $650,000,000. For the next five year period (1906 to 1910) the annual average was $980,000,000. In 1911 it amounted to over $1,400,000,000, and for 1912 the value was $1,386,000,000. The following figures expressed in millions of dollars will illustrate the commercial expansion of the country during the last ten years:—

Year.	Imports.	Exports.	Total.
1902	$275	$425	$ 700
1904	300	500	800
1906	322	514	836
1908	390	484	874
1910	490	713	1,203
1911	600	800	1,400
1912	604	782	1,386

An Unexploited Empire.

This marked increase in the foreign trade of Russia in recent years is the outward sign of a process that is going on within the country. Russia has been described as "a gigantic and largely unexploited empire." Her population is about 70 per cent. greater than that of the United States, being estimated at 170,000,000, and is rapidly increasing. The area of Russia is two and a half times that of Canada. The wealth of natural resources is proportionate—timber, oils, minerals and fuel being found in profusion.

Industrial Transformation.

This vast empire is only beginning to come into its own. Slowly but surely education is spreading among the mass of the Russian people. Railroads are playing their part in the opening up of new territory. Every year large tracts of virgin land are put under cultivation. This whole process of transformation is under governmental direction. The policy of the administration may be summed up in the phrase, "Russia for the Russians." In keeping with this policy, population is being transferred in large bodies from the more thickly settled areas of western Russia to the open spaces of Siberia.

Possibilities of Canadian Trade.

The possibilities for Canadian trade arising out of this economic transformation should be apparent. In the opening up of Siberia and the less thickly settled districts of Russia a process is taking place which in some respects is comparable with Canadian western progress. From the similarity of conditions, therefore, Canadian producers should be in an advantageous position to gauge the possibilities and the requirements of the Russian market. This may be illustrated by the case of agricultural implements. Canadian manufacturers of these articles—subject to financial conditions being satisfactory—should be able to compete advantageously for a share of the large trade in this item which will result from the further development of Siberia.

Canadian Exports to Russia.

Agricultural implements in 1913 accounted for approximately six-sevenths of the total exports from Canada to Russia, the value of this item being $1,841,483 out of a total export to Russia of $2,145,236. The only other items of any account were cereal foods of a value of $164,532, and flour of a value of $113,905. The trade in agricultural implements, however, should indicate the possibilities for the future of our trade with Russia.

Value of Russian Market.

The transformation of Russia and the development of the country generally will bring about an increase in the qualities of imported goods this market will be able to absorb. Russia is essentially a producer of raw materials and foodstuffs, commodities in which the labor cost is inconsiderable. As the conditions are favourable, a development of manufactures will undoubtedly come in time. It will be many years, however, before the Russian manufacturers will be able to meet or even to keep pace with the growing needs of the people. The result must therefore be a dependence on other countries for the supply of manufactured articles in exchange for raw materials.

The relative unimportance of Russian manufactures may be seen from the following table of the distribution of exports from Russia, taken from Mr. J. D. Whelpley's book, "The Trade of the World," from which much of the present matter has been obtained:—

Distribution of Exports.

Foodstuffs	65 per cent.
Raw materials and partly manufactured goods	30 "
Animals	2½ "
Manufactured goods	2½ "

Nearly half of the export trade of Russia consists of grain. The principal manufactures exported are rubber goods, textiles, crockery, glass and metal goods. The export of manufactured goods, due to the growing absorptive powers of the home market, has not shown any appreciable increase during the last ten years. The significance of the above percentages of the different classes of exports from Russia may be realized from the fact that manufactured goods comprise roughly about 14 per cent. of the value of the total exports from Canada.

The Present Opportunity.

The possibilities even in normal times of the trade with Russia should now be realized. The war, however, as the Minister of Foreign Affairs points out, presents an exceptional opportunity for other countries to open up or to extend their trade. In the trade and finance of Russia the position of Germany has been very strong. Russia exports to Germany more than she does to any other three countries, and out of a total import in 1912 of a value of $604,000,000, Germany supplied $274,158,190, and Austria-Hungary $16,819,385. During the progress of the war these purchases by the Russians of German and Austrian goods can no longer take place. Russia is therefore thrown upon her own resources or must look to other countries with which she is not at war for the supply of goods formerly obtained from Germany and Austria-Hungary. The opportunity thereby presented to other countries should, if taken full advantage of, result in increased permanent trade with these countries. It should be remembered, however, that after the cessation of hostilities Germany will make every effort to recover the trade lost to her during the war.

SUPPLANTING GERMAN GOODS IN BRITAIN.

Canadian manufacturers of hardware and woodenware may find it to their advantage to communicate with Mr. Herbert J. Rogers, of the Canadian United Manufacturers Agency, London, England. Mr. Rogers has written to INDUSTRIAL CANADA stating that he will be in Canada the greater part of November for the purpose of getting in touch with Canadian manufacturers who are able to export hardware and woodenware goods to Britain, which were formerly bought from Germany. Lists should be sent to him and prices, C.I.F. British ports, care Frank H. Scott, 404 Coristine Building, Montreal.

WORK ON ROYAL CONNAUGHT HOTEL STARTED.

The contract for the New Royal Connaught Hotel, Hamilton, Ont., which is to cost more than a million dollars, has been let to the Stone & Webster Co., Boston, Mass.

Excavation work will start immediately on the site of the hotel on King Street east and concrete pilings will be driven shortly afterward. Contracts for the steel work were let some time ago to the Hamilton Bridge Company, Hamilton, and the steel for the new buildings is now said to be ready for delivery. From the contractors, Stone & Webster, assurance has been received that all sub-contracts will be let in Canada and preferably in Hamilton. Canadian goods and Canadian workmen will be employed throughout.

The new building is to be 12 stories in height and will contain 250 rooms. Every room will have a bath attached. One million dollars will be spent on the building alone, and it is estimated that the furnishings will cost $100,000 more. When completed the hotel will be the equal of any in Canada.

It is understood that the construction work will cost $675,000 alone, exclusive of the cost of the elevator equipment and building decorations, which will involve an expenditure of about $80,000 more.

The names of the officers and directorate responsible for the venture are enough in themselves to insure success and inspire confidence. The Officers are: Sir John Gibson, President; H. L. Frost, Vice-President, and G. H. Levy, Secretary. The Directors are: William Southam, Robert Hobson, C. A. Birge, C. S. Wilcox, H. H. Biggert, A. C. Dann, R. L. Ennis, A. W. Day, P. J. Myler, Col. D. R. Moodie, F. A. Dudley and J. W. Rothwell, the two last named directors representing the United Hotel Company.

CARBIDE MANUFACTURE.

One Canadian company which will benefit—and having seized the opportunity, is benefitting materially—through the hostilities in Europe, is the Shawinigan Water and Power Company of Montreal. The Shawinigan Company utilizes, at certain seasons of the year, a surplus of its power in the manufacture of calcium carbide used in the generating of acetylene gas and for other purposes.

South American cities consume very large quantities of carbide annually for lighting and other purposes and have been accustomed to draw their supplies from Germany. This source of supply having been cut off, the Shawinigan Company made strenuous efforts to obtain a share of the business which was naturally lost to Germany. These efforts have been rewarded with the result that the Shawinigan is now shipping considerable quantities of carbide to South America.

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The Toronto Hydro-Electric System

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FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of October, 1914.

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

C.R.C.	R.R. No.	Effective.	Description.
Canadian Pacific Railway.			
Sup. 4 W 1920	Sup. 4 W 3115	Oct. 13-14	Commodities C. P. and C.N. stations to points in Eastern Canada.
Sup. 10 W 1969	Sup. 10 W 3235	Various dates	Commodities between stations on C.P. Western lines.
Sup. 5 W 1973	Sup. 5 W 3240	Oct. 14-14	Class and commodity rates between Vancouver, Westminster, Victoria and points on Western lines.
Sup. 6 W 1953	Sup. 6 W 3215	Various dates	Class and commodity rates between Port Arthur, Fort William, Westfort and stations west.
W 1986	W 3269	Nov. 10-14	Dressed meats and packing house products, Calgary and Edmonton to points in U.S.
Sup. 8 W 1827	Sup. 8 W 2907	Nov. 11-14	Commodities C.P., C.N. and G.T.P. stations to points in U.S.
W 1988 cancels W 1967	W 3271 cancels W 3227	Nov. 12-14	Commodities between San Francisco, Oakland, etc., and C. P. Western line stations.
Sup. 6 W 1973	Sup. 6 W 3240	Oct. 16-14	Class and commodity rates between Vancouver, Victoria, Westminster and stations on C.P. Western lines.
Sup. 8 W 1953	Sup. 8 W 3215	Oct. 22-14	Commodity rates between Port Arthur, Fort William, Westfort and stations on C. P. Western lines.
Sup. 19 W 1919	Sup. 19 W 3111	Oct. 22-14	Switching and interswitching at C. P. stations.
Sup. 28 W 1351	Sup. 28 W 1983	Oct. 22-14	Weighing of C.L. freight on track scales.
Sup. 11 W 1969	Sup. 11 W 3235	Various dates	Commodities between C. P. Western line stations.
Sup. 31 W 1615	Sup. 31 W 2443	Oct. 24-14	Lumber, shingles, etc., Coast and interior mills to points in Eastern Canada.
Sup. 37 W 1806	Sup. 37 W 2866	Oct. 24-14	Lumber, shingles, etc., Coast and interior mills to stations on C. P., C.N., and G.T.P.
Sup. 2 E 2834	Sup. 2 E 2466	Nov. 21 (A) Oct. 26 (R)	Class and commodity rates, Eastern Canada to Oriental ports.
Sup. 14 E 1714	Sup. 14 E 1301	Oct. 18-14	Canned Goods C.L. between C. P. stations.
Sup. 48 E 2713	Sup. 48 E 2330	Oct. 17-14	Commodities between C. P. stations.
Sup. 19 E 2332	Sup. 19 E 1932	Oct. 14-14	Commodities for export to Montreal.
Sup. 49 E 2713	Sup. 49 E 2330	Oct. 15-14	Commodities between C. P. stations.
Sup. 2 E 2838	Sup. 2 E 2465	Oct. 19-14	Commodities between C. P. stations.
Sup. 30 E 2529	Sup. 30 E 2133	Nov. 16-14	Commodities C. P. stations to points in U.S. Reduction.
Sup. 50 E 2713	Sup. 50 E 2330	Oct. 20-14	Commodities between C. P. stations.

C.R.C.	R.R. No.	Effective.	Description.
Canadian Pacific Railway.			
Sup. 32 E 2359	Sup. 32 E 1959	Sept. 15-14	Paper Commodities between stations in Eastern Canada. Reduction. Re-issue.
Sup. 27 E 2529	Sup. 27 E 2133	Oct. 7-14	Commodities, C.P. stations to points in U.S. Reduction. Advance.
Sup. 1 E 1699	Sup. 1 E 1286	Oct. 10-14	Class and Commodity rates, C.P. stations to St. Johns, N.F., and other points on Reid-Newfoundland Ry. Reissue. Advance.
Sup. 44 E 2713	Sup. 44 E 2330	Sept. 14-14	Commodities between C.P. stations. Reduction.
Sup. 46 E 2713	Sup. 46 E 2330	Sept. 24-14	Commodities between C.P. stations. Reduction.
Sup. 18 E 2785	Sup. 18 C.I. 146	Oct. 10-14	Cancellation of rate of $4.90 gross ton on Pig Iron, C.L. Hamilton to Woodstock, N.B. Advance.
Sup. 58 E 2855	Sup. 58 C.Y. 31	Sept. 16-14	Sugar C.L. Wallaceburg to Huntsville. Reduction.
Sup. 20 E 1011	Sup. 20 C.I. 25	Oct. 14-14	Iron Commodities, Welland, Port Robinson.
Sup. 2 W 1969	Sup. 2 W 3235	Various dates.	Commodities between C.P. Western line stations.
Sup. 3 W 1969	Sup. 3 W 3235	Various dates.	Commodities between C.P. Western line stations.
Sup. 1 W 1973	Sup. 1 W 3240	Various dates.	Class and commodity rates between Vancouver, Westminster, Victoria, etc., and points east.
Sup. 34 W 1806	Sup. 34 W 2866	Sept. 16-14	Lumber, shingles, etc., B.C. and interior mills to points in C.P., C.N. and G.T.P. railways.
Sup. 17 W 1739	Sup. 17 W 2697	Sept. 20-14	Fir doors, in the white unglazed, C.L. Westminster to Vancouver, 5c. per 100 lbs.
W 1982 cancels W 1887	W 3256 cancels W 3047	Oct. 17-14	Copper commodities, Smelter, Grand Forks, Seattle, etc., to points east.
Sup. 4 W 1911	Sup. 4 W 3095	Oct. 19-14	Ores and concentrates, B.C. stations to points in U.S.
Sup. 2 W 1973	Sup. 2 W 3240	Various dates.	Class and commodity rates between Vancouver, Westminster, etc., and points east.
Sup. 4 W 1969	Sup. 4 W 3235	Various dates.	Commodities between C.P. Western line stations.
Sup. 3 W 1920	Sup. 3 W 3115	Sept. 21-14	Commodities stations on C.P., C.N. and E. & N. railways to points in Eastern Canada.
Sup. 6 W 1827	Sup. 6 W 2907	Oct. 22-14	Commodities stations on C.P., C.N. and G.T.P. to points in U.S.
Sup. 5 W 1969	Sup. 5 W 3235	Various dates.	Commodities between stations on C.P. western lines.
W 1983 cancels W 1896	W 3260 cancels W 3065	Sept. 29-14	Rules and regulations on C.P. and E. & N. railways.
Sup. 6 W 1969	Sup. 6 W 3235	Various dates.	Commodities between C.P. Western line stations.
Sup. 7 W 1969	Sup. 7 W 3235	Various dates.	Commodities between C.P. Western line stations.

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Address .....

C.R.C.	R.R. No.	Effective.	Description.
Canadian Northern Railway.			
Sup. 29 455	Sup. 29 761	Oct. 2-14	Switching at C.N. stations. Reduction.
Sup. 1 W 813	Sup. 1 W 1488	Sept. 30-14	Class and commodity rates between Brandon, Portage La Prairie, Winnipeg, etc., and Vancouver, Victoria and Westminster, B.C.
E 514 cancels E 177	E 582 cancels E 206	Nov. 16-14	Class rates, N. St. C. & T. stations to Buffalo, Black Rock, and Suspension Bridge, N. Y. Advance.
E 515 cancels E 488	E 583 cancels E 508	Nov. 16-14	Newsprint paper C. L. Merritton and Thorold to points in U.S. Advance.
Toledo, St. Louis & Western R. R.			
A 36 cancels A 2	1800 B cancels 1800 A	Nov. 16-14	Iron and steel articles T. St. L. & W. stations to points in Canada.
E 2986	C.U. 90	Nov. 16-14	Hides and skins, G. T. stations to points in U. S. Advance.
E 2988 cancels E 2755	C.P. 110 cancels C.P. 101	Nov. 16-14	Wood pulp C.L. Merritton and Thorold to points in U.S. Advance. Reduction.
E 2989 cancels E 176	V. 61 cancels G.A. 10	Nov. 16-14	Class rates G.T. stations to points in U.S.
E. 2990 cancels E 2900	C.P. 111 cancels C.P. 109	Nov. 15-14.	Paper C.L. Merritton and Thorold to stations in the U.S. Advance.
E 2995 cancels E 2758 E 2784 E 2944	C.W. 92 cancels C.W. 75 C.W. 78 C.W. 86	Nov. 16-14	Commodities Buffalo, Black Rock and Suspension Bridge, N. Y. to points in Canada. Advance. Reduction.
E 2996 cancels E 2684	C.W. 93 cancels C.W. 72	Nov. 16-14	Commodities between G. T. stations and to connecting lines. Advance.
E 3001 cancels E 1814	C.F. 274 cancels C.F. 150	Nov. 16-14	Lumber and forest products, stations west of Barry's Bay and Gananoque Jct. to stations in U.S. Advance.
E 3002 cancels E 31-32 35-36 578 2496	V. 62 cancels G.A. 6-7 8-9-V. 1 V. 39	Nov. 16-14	Class rates, stations Dorval and west to points in U.S. Advance.
Michigan Central Railroad.			
2285 cancels 1530 1966	9251 B cancels 8203 8207	Nov. 16-14	Iron and steel, stations in M.C.R.R. and connections to points in Canada.
2259 cancels 1436 1688	9392 A cancels 7944 8542	Nov. 16-14	Binder twine, C.L. Welland to points in U.S.
Erie Railroad.			
165 Cancels 105	122 A	Nov. 16-14	Iron and steel, Erie R.R. stations to points in Canada.
Chesapeake & Ohio Railway.			
194 cancels 87	15423 cancels 13335	Nov. 16-14	Iron and steel C. & O. stations to points in Canada.
33 cancels 10	2400 C cancels 2420 A	Nov. 16-14	Billets, blooms, iron and steel articles, etc., C. & O. stations to points in Ontario.
Chicago, Indiana & Southern R. R.			
166 cancels 112	947 B cancels 997	Nov. 16-14	Class rates C. I. & S. stations to points in Canada.
165 cancels 113	996 B cancels 996	Nov. 16-14	Class rates C. I. & S. stations to points on G.T.R. in Ontario.
162 cancels 138	981 C cancels 981 A	Nov. 16-14	Class rates C. I. & S. stations to points in Ontario.
161 cancels 139	400 B cancels 400	Nov. 16-14	Class and commodity rates C.I. & S. stations to points in Canada.
159 cancels 142	300 B cancels 300	Nov. 16-14	Commodities C. I. & S. stations to points in Canada.
Cincinnati, Hamilton & Dayton Railway.			
331 cancels 282	5602 D cancels 5602 B	Nov. 16-14	Commodities C. H. & D. stations to points in Canada.
319 cancels 269	5154 D cancels 5154 B	Nov. 16-14	Iron and steel C.H. & D. stations to points in Canada.
320 cancels 291	5601 C cancels 5601 A	Nov. 16-14	Commodities C.H. & D. stations to points in Canada.
321 cancels 276	5603 C cancels 5603 A	Nov. 16-14	Commodities, Indianapolis and Moorefield, Ind., to points in Canada.
325 cancels 280	5604 C cancels 5604 A	Nov. 16-14	Commodities, Cincinnati, Ohio, to points in Canada.
327 cancels 285	5600 D cancels 5600 B	Nov. 16-14	Commodities C.H. & D. stations to points in Canada.
Lake Shore & Michigan Southern Ry.			
262 Cancels 252		Nov. 16-14	Class and commodity rates, L. S. M. S. stations to points in Canada.
New York, Chicago & St. Louis Railway.			
224 cancels 161	276 C cancels 276 D	Nov. 16-14	Iron and steel, N.Y.C. & St. L. stations to points in Canada.
Vandalia Railroad.			
Sup. 31 45	Sup. 31 28 E	Nov. 16-14	Class and commodity rates Van. stations to points in Canada.
Baltimore and Ohio Railroad.			
Sup. 17 1044		Oct. 15-14	Commodities, B. & O. stations to points in Canada.
Sup. 18 1110		Nov. 16-14	Iron and steel, B. & O. stations, to points in Ontario and Quebec.
1303 Cancels 851		Nov. 16-14	Iron and steel, B. & O. stations, to points in Canada.
1322 Cancels 1035		Nov. 16-14	Iron and steel, B. & O. stations to points in Canada.
Cleveland, Cincinnati, Chicago & St. Louis Ry.			
376 cancels 2	407 B cancels 407	Nov. 16-14	Class rates C.C.C. & St. L. Ry. stations to points in Canada.
377 cancels 313	811 J cancels 811 H	Nov. 16-14	Class and commodity rates C.C.C. & St. L. stations to points in Canada.
372 cancels 132 317	1480 A cancels 1501 B 1485 D	Nov. 16-14	Iron and steel, C.C.C. & St. L. stations to points in Canada.

EDDY'S



MATCHES



The Ritz-Carlton Hotel

SHERBROOKE STREET, MONTREAL

offers the Comfort, Service and Cuisine of the famous Ritz chain of Hotels and Restaurants round the world, at similar rates to those of other leading hotels in Canada. 3



Iron Fences, Wire Fences, Gates, Fire Escapes, Jail Cells, Office Wirework, Wire Baskets, and all kinds of Builders' Wire and Ironwork. . .

The PAGE WIRE FENCE CO., Limited

Walkerville Toronto, Montreal, St. John

MEETING OF ROYAL CANADIAN INSTITUTE.

The inaugural meeting of the Royal Canadian Institute will be held in the Physics Building, University of Toronto, Toronto, on November 7th. Addresses will be delivered by Dr. Raymond F. Bacon, Director of the Mellon Institute of Scientific and Industrial Research, Pittsburgh University, and by the President, Mr. Frank Arnoldi, K.C. The Society is advocating the establishment of a Bureau of Scientific and Industrial Research, as a practical means of securing co-operation between science and industry in Canada. Invitations may be secured from the secretary, 198 College Street, Toronto.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

297 **Shovels.**—A South African firm of mechanical engineers asks for catalogues with f.o.b. prices on Canadian-made shovels.

298. **Coal Tar.**—A Durban firm of engineers asks for f.o.b. prices on Canadian coal tar.

299. **Asbestos Slates.**—A South African engineering firm makes inquiry for f.o.b. quotations on Canadian asbestos slates.

300. **Packings, Steam and Water.**—Inquiry is made by a South African firm of electrical engineers for quotations on Canadian steam and water packings.

301. **Electrical Machinery of All Kinds.**—A South African firm of electrical engineers makes inquiry for catalogues with f.o.b. prices on Canadian-made electrical machinery of all kinds.

302. **Mechanical Machinery, All Kinds.**—Inquiry is made by a South African firm of engineers for catalogues with f.o.b. prices on Canadian mechanical machinery of all kinds.

303. **Printing Machinery.**—A South African firm of printers asks for catalogues with f.o.b. quotations on Canadian printing machinery.

304. **Paste Boards, White and Tinted.**—Inquiry is made by a South African firm of printers for quotations f.o.b. on Canadian-made paste boards, white and tinted. Samples also requested.

305. **Flat Printing Paper.**—A South African firm of printers asks for quotations f.o.b. with samples on Canadian flat printing paper.

306. **Bentwood Chairs.**—A Cape Town firm of importers asks for catalogues with f.o.b. prices on Canadian-made bentwood chairs.

307. **Tables.**—Inquiry is made by a South African importer for catalogues with f.o.b. quotations on Canadian-made tables.

308. **Desks.**—A South African firm of importers asks for catalogues with illustrations and f.o.b. prices on Canadian-made desks.

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.

SHEETS TUBES COPPER & BRASS AND RODS

SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT

115-121 SUMACH STREET - - - TORONTO, CANADA

LIQUIDATOR'S SALE BY TENDER

Tenders will be received by the undersigned for the Purchase of Assets belonging to the Estate of

Quality Beds Limited, of Welland, Ontario

As per Inventory as follows :

PARCEL 1—(a) **Freehold Land,** about five acres, in the Town of Welland, Ontario, adjacent to the Grand Trunk Station, with the G.T.R. and Wabash siding, and with the C.P.R. switching interchange.

(b) **Buildings,** two-storey Brick Building, about 300 feet x 60 feet, with Corrugated Iron Warehouse, about 50 feet x 80 feet, etc.

(c) **Hydro-Electric,** Power installation.

(d) **Fixed Plant,** including Electric Motors, Shafting and Cupolas $40,000.00

PARCEL 2—Plant and Machinery (other than fixed plant, included in Parcel 1), $11,767.83, and Patterns, $1,062.01 ..... 12,829.84

PARCEL 3—Merchandise Stock in Trade, Brass and Iron Bedsteads, etc 2,805.46

PARCEL 4—Work in progress, etc., Bed Parts, Supplies, Brass and Iron Tubing, Bolts, Screws and Wires 4,691.24

PARCEL 5 — Photographs, Negatives, Half-tone Cuts, Catalogues, Customers' Lists, Stationery, Trade Marks, etc..... $1,000.00

PARCEL 6—Office Fixtures—three Typewriters, Safe,etc. 850.00

$62,176.54

Parcels 1 and 2 are covered by a First Mortgage of $11,500.

Tenders will be received for one or more Parcels, but Tenders for more than one Parcel should specify the amount tendered on each. Each Tender should be accompanied by a certified cheque for 10 per cent. of the amount of the Tender, which amount will be returned if the Tender is not accepted. The highest or any Tender, not necessarily accepted.

The Inventories may be inspected at the Office of the Liquidator, and the Inventories and all Assets, may be inspected at the Factory, Main Street East, Welland, Ontario.

LYNN B. SPENCER,
Welland, Ontario
His Solicitor herein.

BRYAN PONTIFEX C.A.,
Liquidator,
2 Leader Lane, Toronto.

309. **Organs.**—A South African importer asks to be furnished with catalogues showing illustrations and f.o.b. prices on Canadian organs costing from £7 10s. to £9 fancy, with many stops.

310. **Pine Shelving.**—Inquiry is made by a South African importing house for f.o.b. quotations on Canadian pine shelving.

311. **Poplar Boards.**—A Cape Town merchant asks for f.o.b. quotations on Canadian poplar boards.

312. **Iron.**—A Japanese firm in Yokohama who import large quantities of iron (bars, rods, "T" angle, etc.) desires to come in touch with Canadian manufacturers in this line.

313. **Canadian Produce.**—A Kidderminster firm is open to receive quotations on cheese, bacon and canned goods.

314. **Canadian Produce.**—A Leicester firm is open to receive quotations on hams, bacon and cheese.

315. **Flax Fibre.**—A West of England firm of importers, merchants and spinners of flax and hemp goods desires to get into touch with Canadian shippers of flax fibre.

316. **Hardware.**—A London company, having branches in the Netherlands, Belgium, France, Roumania and Spain, and agencies throughout the continent of Europe, find it necessary to make arrangements for the supply of certain hardware lines hitherto obtained in Germany, and would like to correspond with Canadian manufacturers.

317. **Representative.**—A firm in Denmark solicits the representation of Canadian millers of wheat, rye and corn flour as well as oats and peas.

318. **Box Shooks.**—A Cape Town firm will purchase in large quantities box shooks of all kinds, principally for fruit boxes. Immediate correspondence is requested.

319. **Spruce Deals.**—D.I.F. quotations are asked for by a Cape Town firm on spruce deals 3 x 6 and up from 3½ feet long up.

320. **Machinery.**—A South African firm asks for catalogues and c.i.f. prices Cape Town, on machinery for fruit evaporating.

321. **Gas Mantles.**—A Glasgow commission agent, having large connection and trade in gas mantles, is open to represent Canadian manufacturers.

322. **Hardware.**—Responsible Glasgow hardware house, working the United Kingdom, would be glad to hear from Canadian firms having goods to offer on this market.

BAWDEN PUMPS

For All Purposes



The pumps backed by a grand reputation and the finest installations in Canada.

BAWDEN BASKET STRAINERS AND PIPE FLANGES

BAWDEN MACHINE CO., Limited
133 STERLING ROAD, TORONTO, CANADA

323. **Pit Poles.**—Glasgow firm desires to hear from firms in a position to ship large quantities of pit poles—prompt action requested.

324. **Steel Wire Slate Nails.**—Inquiries have been received for the above, and producers are invited to the Department of Trade and Commerce, Ottawa.

325. **Handles.**—A Midland firm is open to represent Canadian manufacturers of broom, tool and implement handles.

326. **Wood Pulp.**—A Liverpool firm desires the address of Canadian manufacturers of wood pulp, both mechanical and sulphite.

327. **Wire Nails.**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of wire nails from Canada.

328. **Nuts and Bolts.**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of nuts and bolts from Canada.

329. **Wood Naptha, Acetic Acid, etc.**—A London company wishes to purchase supplies of wood naptha, acetic acid, acetone, methyl alcohol, and formaldehyde, and invites offers from Canadian manufacturers.

330. **Wire Nails.**—A London firm of tile manufacturers makes inquiry for the names of Canadian manufacturers of galvanized steel wire slate nails.

331. **Hoes Picks, Shovels, etc.**—A London firm wishes to get into touch with Canadian manufacturers of the following goods and similar lines suitable for the Siamese market: Adzes. hoes, picks, shovels; boot polish (cheap) in glass bottles; cheap dry colors; color for soap; and tiles; cutlery (cheap), pocket knives, etc.; elastic; enamelled ironware; glass, window; guns; imitation jewellery (cheap); iron bars; glace kid leather, colored; iron and zinc wire nails; cheap automatic pocket pistols; shoemakers' supplies; galvanized iron wire singlets for native use; ultramarine blue for soap-making; zinc sheets, 7 ft. x 3 ft.

332. **Hardware, Ironmongery, etc.**—A London firm dealing in hardware, ironmongery, and hardware novelties, would be glad to hear from Canadian manufacturers seeking export trade. They purchase outright.

333. **Cut Nails.**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of cut nails from Canada.

334. **Wood Screws (Iron and Brass).**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of wood screws (iron and brass) from Canada.

335. **Cotter Pins (Split).**—A Manchester firm of wholesale hardware metal merchants wishes to get in touch with exporters of cotter pins (split) from Canada.

336. **Set Screws (Hex. and Square Heads).**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of set screws (hex. and square heads) from Canada.

337. **Nuts (Tapped Whitworth).**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of nuts (tapped whitworth) from Canada.

338. **Machine Screws (Iron and Brass).**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of machine screws (iron and brass) from Canada.

339. **Screw Eyes, Cup Hooks, etc. (Iron and Brass).**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of screw eyes, cup hooks, etc. (iron and brass) from Canada.

340. **Barbed Wire—Galvanized (on Wooden Reels).**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of barbed wire—galvanized (on wooden reels) from Canada.

341. **Domestic Wire Goods.**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of domestic wire goods from Canada.

342. **Canadian Lumber Manufacturers.**—A London firm desires to be placed in touch with Canadian lumber manufacturers from whom they could purchase supplies of oak and other wood for brush manufacturing purposes.

343. **Caustic Soda.**—A Japanese soap manufacturer wishes to obtain quotations from Canadian firms in a position to export caustic soda.

344. **Pitt Props.**—A coal mining company desires to arrange for shipments to Hull of Pit props of fir, or other suitable wood. Quotations desired f.o.b. Montreal or Halifax for large quantities of props ranging in size from 3 to 7 feet long and from 4 to 6 inches in diameter (at the top); also for 100,000 bank bars or splits 5 feet by 6 inches by 3 inches; also for 50,000 sleepers 3 feet by 6 inches by 3 inches, and 2,000 sleepers 6 feet by 6 inches by 3 inches.

345. **Confectionery.**—A Cape Town commission house will consider agency on commission basis for Canadian confectionery.

346. **Carbonic Acid Gas.**—An Irish firm wishes to be placed in communication with Canadian manufacturers of carbonic acid gas packed in steel cylinders for export.

347. **Bronze Powders.**—A Glasgow printing firm desires to be put in touch with Canadian manufacturers of bronze powder for printing purposes. Prompt action required.

348. **Hemlock.**—A Scottish firm seeks supplies of hemlock logs suitable for the manufacture of laths and invites offers from Canadian shippers. Full particulars are obtainable upon application to the Department of Trade and Commerce.

349. **Dowels.**—A Midlands firm of furniture manufacturers asks to be placed in correspondence with Canadian manufacturers of dowels who can quote for their requirements.

"MADE IN CANADA"

Let Us Figure On Your New Roofing

"MADE IN CANADA"

NO matter what kind of building you are erecting or re-roofing it will pay you to get in touch with us. If we cannot supply the roof which will be the most economical for you, we can at least give you the benefit of our experience and advise you as to which roofing would best suit your purpose.

NEPONSET PAROID ROOFINGS

BIRD NEPONSET PRODUCTS Trade Reg. U. S. Mark Pat. Off

are adapted for all types of buildings and each one is the best that can be made in its particular line.

Let us tell you about our Granitized Shingles or the NEPONSET Built-up Roof and other NEPONSET Roofings.

Granitized Shingles are the very latest shingle development, and not only make a durable roofing but are very attractive in appearance, being colored green.

BIRD & SON

"MADE IN CANADA"

Heintzman Building
Hamilton, Ont.

MONTREAL WINNIPEG VANCOUVER ST. JOHN

BIRD & SON, Heintzman Building, Hamilton, Ont., Canada.
Please send samples of roofing for .....
(State type of building.)
Name .....
Address .....

350. **Broom Handles.**—An East Anglian firm desires the address of Canadian manufacturers of broom handles who can quote for prompt delivery.

351 **Motor Tires and Motorcycle Tires.**—A Birmingham firm is open to receive quotations for motorcycle tires.

352. **Nails.**—A Birmingham firm is open to purchase large quantities of wire nails.

353. **Iron and Steel.**—A Scottish firm of merchants, engineers, and exporters report a market for spring steel, galvanized and black fencing wire, galvanized, corrugated and plain sheets, steel shafting and wrought iron and steel tubes, and would like to hear from Canadian manufacturers able to supply.

254. **Wood Turnery, Pulp Board, etc.**—A London correspondent is open to communicate with Canadian manufacturers of domestic wood turnery, pulp board or "leather board," fencing wire, wire nails, lead pencils, and other lines made in the Dominion, willing to consider proposals for extending their export trade through London merchant houses.

355. **Papers and Boards.**—A Nottingham firm is open to purchase papers and boards of various kinds. Samples and specifications are on file at the Department of Trade and Commerce, Ottawa.

356. **Graphite.**—A London firm which has been purchasing supplies of graphite from Germany asks to be placed in communication with Canadian mines who can offer supplies, both crude and refined.

357. **Wire Nails.**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of wire nails from Canada.

358. **Bolts and Nuts.**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of bolts and nuts from Canada.

359. **Domestic Wire Goods.**—A Manchester firm of wholesale hardware and metal merchants wishes to get in touch with exporters of domestic wire goods from Canada.

360. **Birch Poles or Props.**—Inquiry is received from Bristol for birch poles or props of the following dimensions: Length, 6 ft., 6¼ ft., 7 ft., 7½ ft. Diameter at smaller end, 3 in., 3½ in., 4 in., 4½ in., applying to all lengths.

361. **Pianos.**—A Barbadoes firm is anxious to get in touch with Canadian manufacturers of pianos.

362. **Furniture.**—Canadian exporters of furniture are invited to correspond with a Barbadoes firm.

363. **Broom Handles.**—A London firm of brush makers asks to be placed in touch with Canadian manufacturers of broom handles.

364. **Picture Moulding and Brushes.**—A London company, which are large buyers for Australian customers, seeks supplies of picture mouldings and brushes for painters and artists, and invite offerings from Canadian manufacturers.

365. **Furniture.**—A London furniture firm wishes to hear from Canadian furniture manufacturers who can supply bentwood chairs and office and flat desks.

U. S. MALT FOR ENGLAND.

Charles A. Plamondon, president of the Illinois Manufacturers' Casualty Association, will erect an immense malt house in England. He will install all the machinery made in his Illinois plant.

DEATH OF MANUFACTURERS.

Industrial Canada regrets to chronicle the deaths of two members of the Montreal Branch of the Canadian Manufacturers' Association:—

Mr. C. W. Davis, of the Williams Mfg. Co., who was for some years a member of the Montreal Executive, and for a time member of the Executive Council, and Mr. F. H. Ward, of Ames, Holden, McCready, Ltd., formerly of the Canadian Consolidated Rubber Co.

Mr. T. Matte, of Messrs. T. Matte Oiled Clothing Co., Ltd., of Quebec, also died recently.

NEW BOOK ON OCEAN TRAFFIC.

"Ocean Traffic and Trade," is the title of a new book by B. Olney Hough, editor of the American Exporter, which has just been published by the La Salle Extension University, Chicago. This work deals exhaustively with sea traffic, ocean carriers, routes, services, freight rates, agreements, handling, insurance, business getting and credits, and is a valuable addition to the publications in existence relating to these subjects; also it presents a considerable volume of new material.

CANADIAN RED CROSS SOCIETY. SUGGESTIONS FOR WORK.

The Red Cross Society is organized to collect money and goods for the relief of the sick and wounded in war; but as, at the present moment, some agency is needed to collect and distribute comforts for the men in camp in Canada, the Head Office of the Red Cross Society is prepared to forward such contributions. Head Office and Receiving Warehouse, 77 King Street East, Toronto.

The needs of the Society are as follows:—

Money, knitted goods, scarves, sleeping caps, bed socks, wristlets, mitts, housewives, kit bags, bedding, bandages, handkerchiefs, etc.

Shipping Directions.

1. Almost all railways are carrying Red Cross goods free of charge, but local shipping expenses should be borne by the senders.

2. Lists of contents, with the name and address of sender very clearly written, should be placed both inside and outside every parcel.

3. Articles should be sorted before sending, and tied up in dozens or half-dozens, with a label describing contents of package. Wristlets and socks should be sent in pairs, sewn together.

4. Packages emanating from all points between Kingston and Woodstock must be sent to the Central Depot, in Toronto.

5. Packages from Western points in Ontario and the North West must be sent direct to Quebec, in care of Red Cross Branch in that city, until further orders. The closing of navigation in the St. Lawrence River will necessitate a change in this respect, due notice of which will be given.

6. To permit the handling of packages with the least amount of expense and trouble, it is suggested that no package should weigh more than 150 lbs.

"MADE IN CANADA"

This Slogan

Is Going to be an Important Influencing Factor in Canadian Business of the Future

The Manufacturer First on the Spot

Is Going to Have the Best Chance at Canada's Market of

Ten Million People

Secure a Location

in the

Toronto Harbor Industrial District

and Stamp Your Output

"MADE IN CANADA"

Lead the Attack on Canada's Markets

AND LET OTHERS DO THE FOLLOWING

Three Transcontinental Railways
Free Sidings Free Interswitching
Electric Power at Cost

The Toronto Harbor Commissioners

50 Bay Street ALEX. C. LEWIS (Secretary) Toronto, Canada

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Calgary, Alta.

Work will commence immediately on the warehouse for Simington Grocery Company, which is estimated at a cost of $35,000.

Manchester, Alta.

The Western Canada Cordage Co., Limited, will commence work this fall on their new factory and office building in Manchester, a suburb of Calgary. It is estimated to cost $150,000.

Medicine Hat, Alta.

The Maple Leaf Milling Company's new plant is practically completed.

Redcliff, Alta.

The construction of a large glass plant covering five acres is contemplated.

BRITISH COLUMBIA.

Chilliwack, B.C.

Plans have been drawn for a grain elevator for Rockwell, Theal and Davidson.

New Westminster, B.C.

Operations will be commenced next spring on the rebuilding of the mill of the Salmon River Lumber & Shingle Co., Limited, of Vancouver. The estimated cost is $40,000.

The Brackman-Ker Milling Company have plans in progress and tenders will be called shortly for construction of elevator and warehouse on Front Street, estimated cost $20,000.

Victoria, B.C.

A charter has been received by the Sidney Brick & Tile Company, Limited, capitalized at $150,000.

MANITOBA.

Winnipeg, Man.

The steel work on the Winnipeg warehouse of the Coca Cola Company, of Atlanta, Ga., is completed.

Damage to the extent of $125,000 was done to the plant of J. D. McArthur Lumber Company at Lac du Bonnet, by a fire which broke out recently.

NEW BRUNSWICK.

Jacquet River, N.B.

Work will be carried out by day labor on the new lumber mill to be erected by Louison Lumber Company, Limited.

St. John, N.B.

The Bank of Nova Scotia has recently purchased for $270,000, the big Canadian sardine factory at St. Andrew's, which cost over half a million dollars, and which owing to financial affairs has been closed down for over a year. This factory will now be opened under new auspices.

The sardine industry of the Bay of Fundy is enjoying one of the most profitable seasons in its history. It is expected that the big Canadian sardine factory at St. Andrew's, which cost over half a million, will be reopened under new auspices.

NOVA SCOTIA.

Amherst, N.S.

A meeting composed of over fifty Maritime Province manufacturers was held here on the 6th October for the purpose of forming an Association, to replace the Provincial Branch of the Canadian Federation. Immediate steps were determined upon and definite details will be worked out relative to stimulating trade in the East. It is proposed to send representatives abroad who will inquire into the possibilities for close relations with foreign importers and secure business for the Maritime Province concerns.

Halifax, N.S.

The ten cotton mills of the Dominion Textile Company in Halifax and other eastern cities have resumed operations. Seven thousand persons will be given employment in the mills.

New Campbellton, N.S.

An enterprising Halifax concern, with a fine eye for industrial opportunities, has recognized the possibilities in the immense quantity of blueberries growing yearly at Blueberry Mountain, and has erected a canning factory here.

ONTARIO.

Brampton, Ont.

It is reported that an American firm is desirous of obtaining a site for establishing a factory here. They manufacture furniture decorations, piano cases, electric light fixtures and interior decorations.

Chatham, Ont.

An extension will be built to the plant of the Canada Flour Mills Company.

Cobourg, Ont.

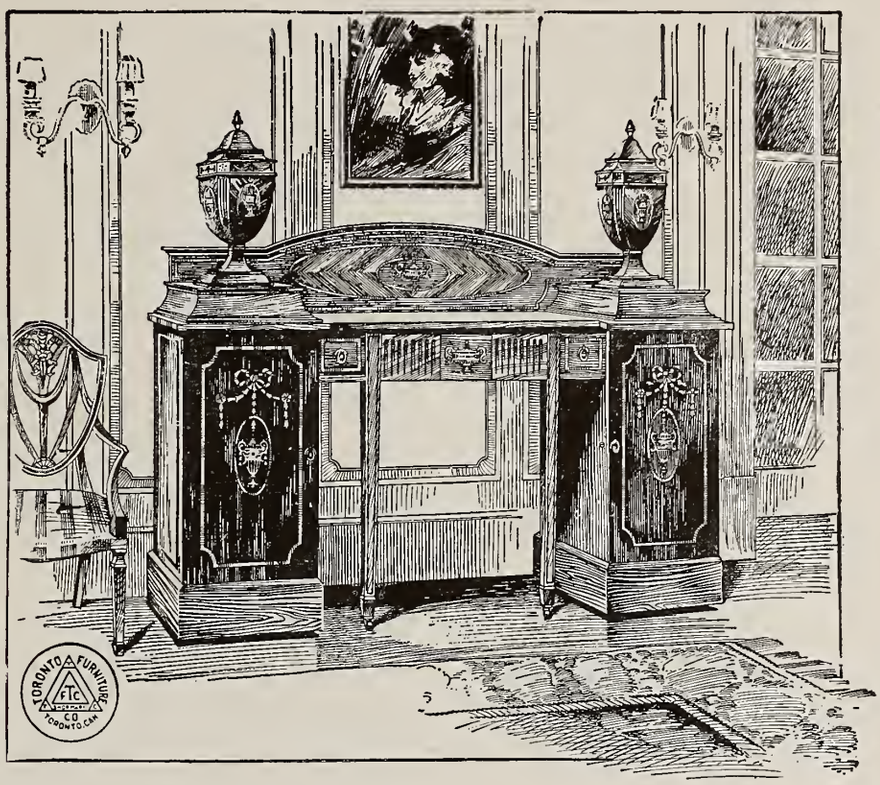
It is estimated that $60,000 will be spent by the British-Canadian Canners, for produce, wages, etc. It is stated that the industry is doing about twice as much business as it did last year. Some 200 hands are employed and the output is 80 cans of corn and 82 cans of tomatoes a minute.

Fort William, Ont.

The Superior Brick Company have been awarded the contract to supply upwards of 1,000,000 bricks to the G.T.P. for the construction of roundhouses, and it is expected that the plant will be kept in operation during the winter.

Galt, Ont.

As suitable building has been purchased the Galt Ornamental Iron Company have decided not to build a factory at present.



A SIDEBOARD after Hepplewhite, distinguished by its flowing lines, graceful yet sturdy construction and beautiful inlay work. Made in solid mahogany. Can be had without the quaint ornamented knife urns if desired.

ALL our styles are made from standard stock patterns and can be had in individual pieces or in sets. To be sure that the furniture you choose is made by us, look for our shopmark on each piece.

FINE PERIOD FURNITURE

"MADE IN CANADA"

THE furniture you bought when you got married, how does it look to-day? Has it improved with time, or are you weary of it and ready to discard it in favor of something better?

Time, after all, determines value, even more than price. For while price may promise good woods and sound workmanship, it doesn't necessarily include good design. The most elaborate, ornamented frames are oftenest found on mediocre paintings, while a Whistler or a Corot needs nothing but the simplest border to set off its intrinsic beauty.

In choosing furniture such as ours, modelled on the notable and enduring compositions of the old-time English cabinet-makers, you have the strongest assurance possible that no matter how long you have it, it will always be good-looking and serviceable. Sometimes you hear it said of a thing that it "wears well to the eye." No better term could be used to describe our furniture. Your pride in its fine lines, well-balanced proportions, studied workmanship, and rich, warm, mellow coloring grows with the years. You will never tire of it or have to replace it because being made in conformity to the laws of good design it will always be in good taste and therefore always in fashion.

Many interesting examples in our collection for Fall, of which the Hepplewhite board shown here is typical, may be seen at representative stores. If you are interested in period furniture, or in good furniture of any kind, you are sure to find in our line well-made and tastefully designed pieces at prices you are prepared to pay.

We will gladly mail you the name of our nearest dealer in your locality and a copy of our handsomely illustrated booklet on "How to Know Period Furniture" upon request.

TORONTO FURNITURE CO., LIMITED

Showrooms and Cabinet Shops: Dufferin St., TORONTO

MEMBERS OF THE HOME MARKETS ASSOCIATION

Hamilton, Ont.

Plans will be ready shortly for the factory of Proctor & Gamble, Ivorydale, Ohio, and Burlington Street, Hamilton.

Iroquois Falls, New Ontario.

The Abitibi Pulp & Paper Company will have their 220-ton paper mill completed next month.

Kingston, Ont.

It is probable that a factory will be erected at Kingston for a new silk company, which is being organized by Mr. W. H. Wyman, former manager of the Corticelli Silk Company.

London, Ont.

Work has been commenced on a factory for the International Fire Works Company of Canada, at London Junction.

Ottawa, Ont.

A new factory to cost $14,000 will be built by the Watson Carriage Company.

Rainy River, Ont.

Work has been commenced on the erection of a box factory in connection with the stave mill of the Western Canada Flour Mills Company.

Sarnia, Ont.

The yards and contents of the Lebel Company have been taken over by the Laidlaw Lumber Company.

Sault Ste. Marie, Ont.

Certain parts of 200,000 shells for the artillery are being manufactured by the Algoma Steel Corporation.

Timmins, Ont.

The Canadian Mines Finance Company are having the work done by day labor on their $20,000 rink.

Toronto, Ont.

Tenders addressed to Sir Adam Beck will be received until October 24th, time having been extended, for construction of a $300,000 office building on University Avenue for the Provincial Hydro-Electric Commission.

Walkerton, Ont.

A full staff of men are being employed on full time by the Canada Furniture Manufacturers.

The factory of the Imperial Cordage Company has been re-opened.

Wallaceburg, Ont.

Modern equipment will be installed in the canning factory which is contemplated by the Canadian Canning Company. The estimated cost is $20,000.

Woodstock, Ont.

The machinery is being installed in the plant of the Royal Broom Company and operations will be started immediately.

QUEBEC.

Hull, Que.

The industrial situation in Hull is steadily improving. The factory of the Canada Mica Manufacturing Co. has been re-opened after being closed for a few days for stock taking. The Canada Cement Company after being closed for over two months commenced running. The officials of the Hull Iron & Steel Works state that their plant will likely be kept running. As soon as there is sufficient water for power the mills of J. R. Booth will be opened.

Montreal, Que.

A fire which broke out in the plant of the Factory Waste & Metal Company was the cause of considerable damage to that Company as well as the Dominion Machinery & Supply Company, the Canadian Steel Products Company, and the Industrial Manufacturing Company.

Tenders are being taken by Anglins, Limited, 65 Victoria Street, on mill work and roofing in connection with the $70,000 warehouse for the St. Lawrence Sugar Refineries, Limited.

Quebec, Que.

The old building of the F. & R. Blouin Company has been razed and a new shoe factory is under construction, at an estimated cost of $3,000.

The Modern Joint Foundry Company in Three Rivers annex has been destroyed by fire. The damage, which is heavy, is said to be covered by insurance.

SASKATCHEWAN.

Regina, Sask.

Western Canada is recognizing its opportunities by incorporating numerous industrial companies. The following are some of the more prominent which have been incorporated lately; Canyon City Saw Mills Company, Limited, capitalization $15,000; Regina Cold Storage and Warehouse Company, capitalization $50,000; Planet Elevator Company, Limited, capitalization $50,000; and Great Western Furniture Company, Limited, capitalization $50,000. One oil company was incorporated, viz., Dominion Petroleum Company, capitalized at $700,000.

Wynyard, Sask.

H. C. Miller is contemplating the erection of a new flour mill to cost $7,000.

OPPORTUNITY FOR CANADIANS.

As iron and steel manufactured articles from Germany have ceased to arrive, Canadian manufacturers have now the opportunity to supply Great Britain with the following articles, inquiries for which have already been forwarded to Ottawa:—

Wire nails, cut nails, nuts and bolts, machine screws, barbed wire, wood screws (iron and brass), cotter pins, sec-screws, screw-eyes, cup hooks, etc., domestic wire goods.—F. A. C. Bickerdike, Canadian Trade Commissioner in Manchester, England.

EXPORT

Direct Representation for Canadian Manufacturers

Offices and Showrooms in the following Cities:

London England
14 FINSBURY COURT, FINSBURY PAVEMENT

Melbourne Australia
PENFOLD HOUSE, 114-116 QUEEN STREET

Auckland New Zealand
34 FORT STREET

Christchurch New Zealand
MANCHESTER STREET

Buenos Aires Argentine
32 FLORIDA

HEAD OFFICE:

IMPERIAL EXPORT COMPANY, Limited

Lumsden Bldg., Corner Adelaide and Yonge Streets, TORONTO

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASAVIAL MATERIALS
*The Ford-Smith Machine Co., Ltd., Hamilton.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.

ACETYLENE WELDING APPARATUS
*L'Air Liquide Society, Montreal, Que.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.
Hough Lithographing Co., Ltd., Toronto.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AGRICULTURAL IMPLEMENTS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

AIR HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

AIR WASHERS
*The Canadian Service Co., Windsor, Ont.

ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE
E. L. Drewry, Winnipeg, Man.

ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS
*T. Pringle & Sons, Montreal.

ASBESTOS:
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS BUILDING LUMBER
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CEMENT SHINGLES
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CORRUGATED SHEATHING
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS MILLBOARD
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS PRODUCTS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS ROOFING SLATES:
*Asbestos Mfg. Co., Ltd., Montreal
*Canadian Asbestos Co.

ASBESTOS SHEATHING:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS THEATRE CURTAINS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.

AUTOMATIC MACHINERY
*The Ford-Smith Machine Co., Ltd., Hamilton.

AUTOMATIC SPRINKLERS
*The General Fire Equipment Co., Ltd., Toronto. Ont.

AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

AWNINGS
*Smart-Woods, Ltd., Montreal.

AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph. Ont.

BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS
*Smart-Woods, Ltd., Montreal.

BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal. Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto. Ltd., Toronto.

BAKING JAPAN
*Berry Bros. Ltd. Winnipeg, Man.

BALL BEARING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation. Galt.

BANK AND OFFICE RAILINGS
*The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston Ont.

BANK RAILINGS and CAGES:
*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London Ont

BASEBALL GOODS
A. J. Reach Co., Toronto.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Goldie & McCulloch Co., Ltd., Gadt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville, Ont.
*Smart-Woods, Ltd., Montreal.

BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER
E. L. Drewry, Winnipeg, Man.

BELT FASTENERS
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELT DRESSING:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
J. L. Goodhue & Co., Danville, P.Q.
Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Goodyear Tire & Rubber Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

BELTING (stitched cotton duck)
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS
Samuel May & Co., Toronto.

BILLIARD TABLES
J. D. Clark Billiard Co., Winnipeg.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:
*A. C. Leslie & Co., Montreal.

BLANK BOOKS:
*Morton, Philips & Co., Montreal.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford. Ont.

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford Ont.
*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.

BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS
Electric Boiler Compound Co., Ltd. Guelph. Ont.

BOILERS.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Canadian Allis-Chalmers, Limited, Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, London, Ont
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph. Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works Ltd., Amherst, N.S.
*Jenckes Machine Co., Sherbrooke.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, heating:
*The Goldie & McCullough Co., Ltd Galt.

BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.

BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford

BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BOILER STANDS
Anthes Foundry Ltd., Toronto.

BOLSTERS
*Canadian Car & Foundry Co., Ltd. Montreal, Que.

BOLTS:
*The National Acme Mfg Co., Montreal.

BOLT CUTTERS:
*Canada Machinery Corporation. Galt.

BOLTS AND NUTS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth. N.S.

BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co. Ltd., Stratford, Ont.

BOOKLETS
Stone Limited, Toronto.
R. G. McLean, Toronto.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,
Ames-Holden-McCready, Ltd., Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

* For Display Advertisement See Index, Page 325

The Consequences are often More Disastrous than a Fire

Your plant and equipment is in all probability well covered by insurance so that your momentary loss will in all probability be small.

Your Enormous Loss

will come from not being able to continue manufacturing operations for some months and the consequent disintegration of a valuable working force, by not being able to fill prevailing orders, by the trade that you lose to your competitor, etc.

Why not safeguard your interests now by installing

Manufacturers' Automatic Sprinklers?

Besides giving **positive protection against disastrous fires,** they will pay for themselves in five years, or less, with the saving they effect in insurance rates.

Better let us quote you on equipping your old or new plant NOW.



THE

GENERAL FIRE EQUIPMENT CO., Ltd., 72 Queen St. E., Toronto

BRITISH ENQUIRIES FOR CANADIAN GOODS.

Mr. Fred Dane, Canadian Trade Commissioner, Glasgow, Scotland, reports that inquiries have been received by him regarding goods which could be secured from Canada to take the place of those formerly obtained from sources of supply now cut off. Amongst the articles inquired for the following list may be of interest to Canadians:

Gimlet-pointed coach screws; iron screws (flat); iron screws (round heads); brass screws (flat heads); brass screws (round heads); cut tacks; bolts and nuts (cup, square); bolts and nuts (square round square); spout bolts and nuts; crucible cast steel files (flat, half-round, round, square); mill saw (one or two square edges); horse rasps; wood files and rasps; air guns; augurs; axes; bits, braces; brackets; carpet sweepers; sash cord; chisels; choppers; clippers; clothes-pegs; manure forks; potato forks; hack saws; hammers; handles (hammer); hatchets; lawn mowers; padlock hasps and staples; pliers; scissors; saws; stones (hones and slips); tin openers; vices; wrenches.

SUGGESTIONS FOR SECURING TRADE.

A bank authority in Kingston makes the following useful suggestions with reference to securing trade in Jamaica:

The Canadian Manufacturers and wholesale houses should ask their bankers in Canada to write their correspondents or branches in Jamaica for names of reliable wholesale or retail dealers, commission merchants, etc.; when these names are furnished merchants could then send prices, samples, etc., and at the same time ask their bankers for reports on the Jamaica firms. In this way, the reports and orders, if any, would reach Canada at the same time, and shippers could forward goods or not according to the reports. Under these present conditions it is impossible to say what the position of any firm here may be in the next three months. No shipment should be made especially where documents are to be delivered on acceptance of drafts, without first inquiring into the responsibility of the consignees.—*Trade and Commerce Report.*

A HINDRANCE TO CANADIAN TRADE.

The Trade and Commerce Department is in receipt of a communication from a leading firm of wholesale grocers who refer to the desire of the Minister of Trade and Commerce to urge the use of goods "made in Canada" instead of imported goods. They express a desire to deal in Canadian packed goods, but find an objection to their doing so, on the ground of *irregular quality.* As an instance, they cite the case of a grocer, who stated he always bought Oregon apples in preference to Canadian, as he could always depend on every box in a large shipment turning out as represented. This could not be depended upon in the case of Canadian apples. Much the same is said to apply in regard to Canadian canned fruit, when contrasted with the standard fruit of Belgian, French or United States canning—the regular quality demanded by modern customers cannot be depended upon. Against these instances they contrast the case of a sugar manufacturer, who built up a reputation by always insisting on every detail being attended to that goes to make quality. Greater attention to such details on the part of Canadian packers and canners would materially assist the Department in its efforts to encourage the use of Canadian goods.

BOWLING ALLEYS
Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.
Samuel May & Co., Toronto.

BOXES, cellular board:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
G. & J. Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAIDS AND NOVELTIES:
The Moulton Mfg. Co., 236 Craig St. E., Montreal.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS GOODS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
*Tallman Brass & Metal Co., Hamilton.

BRASS PLATES
Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS
Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

BRICK
National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway
*Canada Foundry Co., Ltd., Toronto.
Canadian Allis-Chalmers Ltd., Toronto.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters
Geo. Booth & Son, Toronto.

BROOMS
*Boeckh Bros. Co., Ltd., Toronto.
H. W. Nelson & Co., Toronto.
Simms, T. S., & Co., Ltd., Fairville, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:
*Boeckh Bros., Ltd., Toronto.
Simms, T. S., & Co., Ltd., Fairville, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd. Toronto.

BUCKET TANKS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUFFING and Polishing Machinery.
*The Ford-Smith Machine Co., Ltd., Hamilton.

BUILDING
Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed
Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING GRANITE
McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE:
*Northern Electric Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:
*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS
Hough Lithographing Co., Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CALENDARS, ADVERTISING NOVELTIES, etc.
Rolph & Clark, Ltd., Toronto.

CAMERAS
Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

CANVAS
*Smart-Woods, Ltd., Montreal.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PAPER:
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

CARBON PRODUCTS
Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
Canada Carbide Co., Ltd., Montreal. Que.

CARDBOARD
Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS
Toronto Carpet Mfg Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.
*Richard-Wilcox Canadian Co., Limitd, London, Ont.

CARRIERS, box and barrel
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*Wm. & J. G. Greey, Toronto.

CARS, industrial:
*Wm. & J. G. Greey, Toronto.
*Sheldons, Ltd., Galt.

CARTONS, lithographed
Harris Lithographing Co., Toronto.

CASEMENTS, steel
*Herbert Morris Crane & Hoist Company, Ltd.

CASTINGS:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

CASTINGS, brass and bronze:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:
*Galt Malleable Iron Co., Ltd Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CAST IRON PIPE:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

CATALOGUE MAKERS
Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIN BLOCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Herbert Morris Crane & Hoist Company, Ltd.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS
Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO
Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel
The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S
*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

*For Display Advertisement See Index. Page 325

ELECTRIC STEEL CASTINGS

WE CAN SUPPLY

Carbon, Manganese, Alloy, Steel Castings
Forging Ingots, Etc.

Write for prices and particulars

The Electric Steel and Metals Company, Limited
WELLAND, ONTARIO



REDUCE HANDLING EXPENSE
With an "R-W"
Overhead Carrying System

REDUCE YOUR INSURANCE
By using
"R-W" LABELLED FIRE-DOOR FIXTURES

CATALOGS ON REQUEST

The ONE RIGHT WAY to hang a heavy sliding door is on R-W Trolley Hangers

Richards-Wilcox
CANADIAN COMPANY, LTD.
LONDON, ONTARIO.

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . .	$25,000,000
Capital Paid up	$11,560,000
Reserve & Undivided Profits	$13,000,000
Total Assets	$180,000,000

HEAD OFFICE, MONTREAL

BOARD OF DIRECTORS
H. S. Holt, President E. L. Pease, Vice-President
E. F. B. Johnston, K.C., 2nd Vice-President

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OFFICERS
E. L. Pease, General Manager
C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY — Corner William and Cedar Sts

Savings Department at All Branches

THE
Canadian Bank of Commerce

ESTABLISHED 1867

DIRECTORS

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L., President.
Z. A. LASH, ESQ., K.C. LL.D. - - Vice-President.

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Assistant General Manager - JOHN AIRD.

Paid-up Capital -	$15,000,000
Reserve Fund -	$13,500,000

The Bank has branches in every Province in Canada, also in New York, Seattle, San Francisco, Portland, Ore., Mexico City, St. John's, Nfld., and London, Eng.

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED

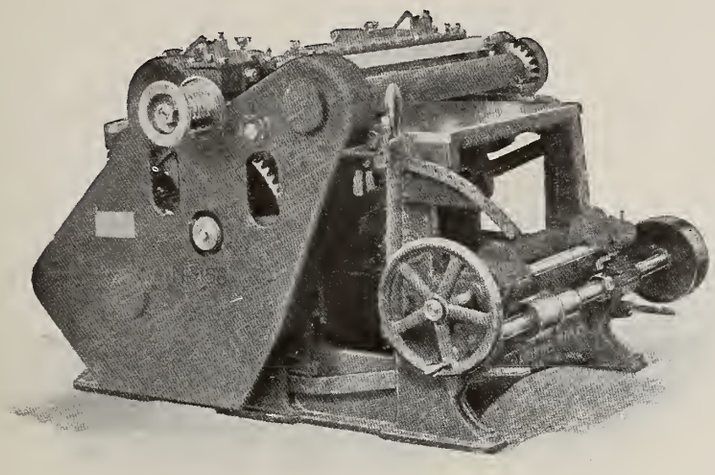
CLUTCHES, conveyors.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.
COATS
Peerless Overall Co., Rock Island, Que.
COBALT OXIDE
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.
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Walter Baker & Co., of Canada, Ltd., Montreal, Que.
COFFEE
S. H. Ewing & Sons, Montreal, Que.
COFFEE IMPORTERS, Roasters and Manufacturers
C. H. Cochrane & Co., Ottawa, Ont.
COLD DRAWN SCREW STEEL:
*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD DRAWN SHAPES, flats, squares and hexagons:
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.
COLLAR BUTTONS
The Arlington Co., of Canada, Ltd., Toronto.
COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.
COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.
COLLARS AND CUFFS waterproof
Williams, Greene & Rome, Berlin, Ont.
COLORS
Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin Williams Co. of Canada, Ltd., Montreal, Que.
COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto.
COMMERCIAL STATIONERS
Rolph & Clark, Ltd., Toronto.
COMMERCIAL STATIONERY:
*Brown Bros., Ltd., Toronto.
*Morton, Phillips & Co., Montreal.
COMPRESSORS
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
CONCENTRATORS:
*Jenckes Machine Co., Sherbrooke.
CONCRETE COATINGS, paints, etc.
The Imperial Varnish & Color Co., Ltd., Toronto.
CONDUITS FOR INTERIOR WIRING
*Conduits Company, Ltd., Toronto.
CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Limited, Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.
CONTRACTORS' PLANT
The Western Steel & Iron Co., Ltd., Winnipeg, Man.
*M. Beatty & Sons, Ltd., Welland, Ont.
CONVEYORS:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jenckes Machine Co., Sherbrooke.
COOLING APPARATUS
*The Canadian Service Co., Ltd., Windsor, Ont.
COPPER:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
COPPERSMITHS
*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.
COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
COPPERWARE AND LANTERNS
Sheet Metal Products Co. of Canada, Ltd., Toronto.
COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

CORDS, braided, spun, knitted
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
CORKS
S. H. Ewing & Sons, Montreal, Que.
CORK BOARD INSULATION
*Robinson Bros. Cork Co., Ltd., Toronto.
CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.
CORK, granulated
*Robinson Bros. Cork Co., Ltd., Toronto.
CORRUGATED BOXES:
*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORRUGATED PAPER:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORSETS
Dominion Corset Co., Quebec, Que.
COTTONADES
Hamilton Cotton Co., Hamilton, Ont.
COTTON TEXTILES:
*Dominion Textile Co., Montreal.
COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.
COUPLERS, steel bar:
*Canadian Steel Foundries, Ltd., Montreal.
COUPLINGS:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
CRANES:
*Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
CRANKSHAFTS
Canada Forge Co., Ltd., Welland, Ont.
CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Ltd., Montreal, Que.
CREAMERY AND CHEESE FACTOR MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Peterboro, Ont.
CREOSOTED MATERIALS:
*The Dominion Creosoting Co., Ltd. Vancouver, B.C.
CRUSHERS, rock.
*Canadian Allis-Chalmers, Limited, Toronto.
CRUSHING ROLLS:
*Jenckes Machine Co., Sherbrooke.
CUES
Samuel May & Co., Toronto.
CUFFS
The Standard Shirt Co., Ltd., Montreal, Que.
CUPOLAS,
*Sheldons, Ltd., Galt.
The Northern Crane Works, Ltd., Walkerville.
CUPS, presentation
Standard Silver Co., Toronto.
CUPS, grease and oil
*The Canadian Winkley Co., Ltd., Windsor, Ont.
CURLED HAIR
Delany & Pettit, Ltd., Toronto.
CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.
CUTLERY
Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.
DENIMS
Hamilton Cotton Co., Hamilton, Ont.
DESIGNERS
Ontario Engraving Co., Hamilton, Ont.
DESIGNERS and PRINTERS OF BOOKLETS, ETC.
Grip, Ltd., Toronto.
DINING ROOM SUITES
The George McLagan Furniture Co., Limited, Stratford, Ont.
DIES
*Butterfield & Co., Rock Island, P.Q.
DISC GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.
DISINFECTING APPARATUS
Spramotor Co., London, Ont.
DOOR HANGERS
*Canadian Allis-Chalmers, Ltd., Toronto.
*Richards Wilcox Canadian Co., Ltd., London, Ont.

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Daly & Morin, Montreal, Que.
DREDGES
*M. Beatty & Sons, Ltd., Welland, Ont.
DRESSING, belt
Sadler & Haworth, Montreal, Que.
DRESS AND CLOAK TRIMMINGS
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
J. Henry Peters Co., 1 Mincing St., Toronto.
DRILLS:
*Canada Machinery Corporation, Galt.
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.
DRILLS, rock
*Canadian Allis-Chalmers, Ltd., Toronto.
DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.
DROP FORGINGS:
*Canadian Billings & Spencer, Ltd., Welland.
DROP HAMMERS:
*Canada Machinery Corporation, Galt.
DRY BATTERIES
*Northern Electric Co., Ltd., Montreal, Que.
DRY CELLS, electric
Canadian Carbon Co., Ltd., Toronto.
DRY COLORS
P. D. Dods & Co., Ltd., Montreal Que.
The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co. Ltd., Windsor, Ont.
DRY KILN EQUIPMENT
*The Canadian Service Co., Ltd., Windsor, Ont.
DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto.
DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.
DYERS AND FINISHERS
R. Parker & Co., Toronto.
DYNAMITE
Canadian Explosives Ltd., Montreal, Que.
DYNAMOS.
*Canadian General Electric Co., Ltd., Toronto.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.
EIDERDOWN
Galt Knitting Co., Ltd., Galt.
ELECTRIC APPLIANCES.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC BATTERIES.
*Canadian General Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.
ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.
ELECTRIC INSULATED WIRE
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC LAMPS.
*Canadian General Electric Co., Ltd., Toronto.
*Packard Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto.
ELECTRIC BATTERIES
Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING
Central Press Agency, Toronto.
ELECTRICAL SUPPLIES
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Crouse-Hinds Co. of Canada, Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Jones & Moore Electric Co., Ltd., Toronto.
*Munderloh & Co., Montreal.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto.
ELEVATORS:
*Jenckes Machine Co., Sherbrooke.
Turnbull Elevator Mfg. Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.
ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford.
ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto.
ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.
ELEVATORS, hydraulic and electric
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
EMERY DRESSERS and STANDS
*The Ford-Smith Machine Co., Ltd., Hamilton.
EMERY GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.
EMERY WHEELS
*The Ford-Smith Machine Co., Ltd., Hamilton.
EMERY WHEEL GUARDS
*The Ford-Smith Machine Co., Ltd., Hamilton.
EMERY WHEEL Safety Flanges
*The Ford-Smith Machine Co., Ltd., Hamilton.
ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.
ENAMELED KITCHENWARE:
*The Davidson Mfg. Co., Ltd., Montreal.
ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.
ENGINES
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Sheldons, Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.
ENGINES, gas and gasoline
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Massey-Harris Co., Ltd., Toronto.
ENGINES, gasoline tractor plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Limited, Montreal.
ENGINES, hoisting
*M. Beatty & Sons, Welland.
*Waterous Engine Works Co., Ltd., Brantford.
ENGINES, marine gasoline
*Canadian Fairbanks-Morse Co., Limited, Montreal.
ENGINES, steam plowing and threshing
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
Sawyer-Massey Co., Ltd., Hamilton, Ont.

*For Display Advertisement, See Index, Page 325



Berlin Surfacers

WE have specialized in planing machines for years. Berlin surfacers represent the experience of all these years. You can make no mistake by putting your surfacing requirements up to us. We build surfacers for every purpose. Whatever surfacing you want to do may be done at lowest cost on Berlin.

Are Your Cabinet Surfacers Losing Money For You at the Sander?

Are you thinking of replacing or adding to your present surfacing equipment? Then judge the earning-power of Berlin Surfacers by comparing them with others. Mail your card request for complete data now — so you'll have it for reference when you want it.

DON'T depend on your sander to correct the inferior work of your surfacers. That isn't profitable. The inefficiency of one machine is handicapping the other.

Surface your stock on the Berlin "156" Single Cabinet Surfacer. Then once through at the sander will suffice. And instead of sanding two pieces at one time the uniformity of the surfacing will enable your sander operator to feed stock across the entire width of the machine. Its efficiency is increased 100 per cent. That assures profit, absolutely.

Equipped with round heads carrying thin steel knives, which may be ground and jointed on the machine the "156" produces a finish that shines. Sanding all your stock won't be necessary.

The sturdy construction and the use of only proven design features assures low upkeep cost. There'll be fewer necessary shut downs, less lost time. The top infeed roll and chip-breaker may be sectional. The wedge method of bed adjustment assures its stability. Fine finish is therefore assured always.

BERLIN MACHINE WORKS, Limited, Hamilton, Ont.

Largest Manufacturers of Woodworking Machinery in the World

UNITED STATES PLANT BELOIT, WISCONSIN

ENGRAVERS
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.
Rolph & Clark, Ltd., Toronto.
Stone, Limited, Toronto.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote
American Bank Note Co., Ottawa, Ont.

ENGRAVING:
*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.

ENVELOPES
Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

ESCUTCHEON PINS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR
Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS
Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto.

EXPLOSIVES, high
Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.
J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

FASTENERS, belt
Sadler & Haworth, Montreal, Que.

FENCES and GATES:
*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire
Banwell Hoxie Wire Fence Co., Hamilton, Ont.

FENCES, iron
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

FENCING, wire
The Great West Wire Fence Co., Ltd., Winnipeg, Man.
C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:
*The E. B. Eddy Co., Ltd., Hull.

FILES
Henry Disston & Sons, Ltd., Toronto.
*The Nicholson File Co., Port Hope, Ont.

FIRE ALARM APPARATUS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE DOOR HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:
*Waterous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:
*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS
*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.
*The General Fire Equipment Co. Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford.

FIRE HOSE
*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.
Dunlop Tire and Rubber Goods Co., Limited, Toronto.
*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.
*Canadian H. W. Johns-Manville Co., Toronto.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The General Fire Equipment Co., Ltd., Toronto. Ont.

FIRE SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Rockwood Sprinkler Co., of Canada, Ltd., Montreal. Que.
*The General Fire Equipment Co., Ltd., Toronto. Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FIREPROOF WINDOWS and DOORS:
*A. B. Ormsby, Ltd., Toronto.
*Geo. W. Reed & Co., Montreal.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King, Ltd., Montreal, Que.

FLAGS
*Smart-Woods, Ltd., Montreal.

FLASHLIGHTS
Canadian Carbon Co., Toronto.
Northern Electric Co., Ltd., Montreal, Que.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLOUR MILL MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.

FLUE LINERS
Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
*Sheldons, Ltd., Galt.

FORGINGS
Canada Forge Co., Ltd., Welland. Ont.
*The Steel Co. of Canada, Ltd. Hamilton.

FOUNDRY EPUIPMENT
The Northern Crane Works, Ltd., Walkerville.
*The Ford-Smith Machine Co., Ltd., Hamilton.

FOUNTAIN FRUITS and Juices
J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:
*Dodge Mfg. Co., Ltd., Toronto.

FRICTION HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

FRINGES AND TASSELS
The Moulton Mfg Co., 236 Craig St. E., Montreal.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal. Que.

FUR TRIMMINGS, ornaments and buttons
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air
Bedford Stove Co., Bedford, Que.

FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford Ont.

GALVANIZED IRON:
*A. C. Leslie & Co., Montreal.

GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
*The Waterous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground
S. F. Bowser & Co., Toronto.

GASOLINE
*The Imperial Oil Co., Ltd., Toronto.

GAS PRODUCERS:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

GENERATORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.
*International Engineering Works, Ltd., Amherst, N.S.

GENERATORS, electric
*Canadian General Electric Co., Ltd., Toronto.

GINS
The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd. Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS
A. R. Clarke & Co., Ltd., Toronto.

GLUE
Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.

GRATES.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*International Engineering Works. Ltd., Amherst, N.S.

GRAVITY CARRIERS
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDING and Polishing Machinery
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDING WHEELS:
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal
*Northern Electric Co., Ltd., Montreal, Que.

GYPSUM, crushed
*Albert Mfg. Co., Hillsborough, N.B.

GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HACK SAW FEEDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
F. W. Fearman Co., Ltd., Hamilton. Ont.

HANGERS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS TO DETAIL
Wilson Bros., Ltd., Collingwood, Ont.

HARNESS
Lamontagne Ltd., Montreal, Que.

HATS, men's straw
The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope
The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:
*The Goldie & McCullough Co., Ltd., Galt.

HEATING APPLIANCES:
*Sheldons, Ltd., Galt.
*Northern Electric Co., Ltd., Montreal, Que.

HEATING SYSTEMS
Gurney Foundry Co., Ltd., Toronto.

HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

HINGES:
*The Steel Co. of Canada, Ltd., Hamilton.

HOISTS
*Northern Crane Works, Ltd., Walkerville, Ont.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.
The Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston. Ont.

HOSE, rubber.
*Canadian Consolidated Rubber Co., Ltd., Montreal. Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

HOTEL FIXTURES
Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.

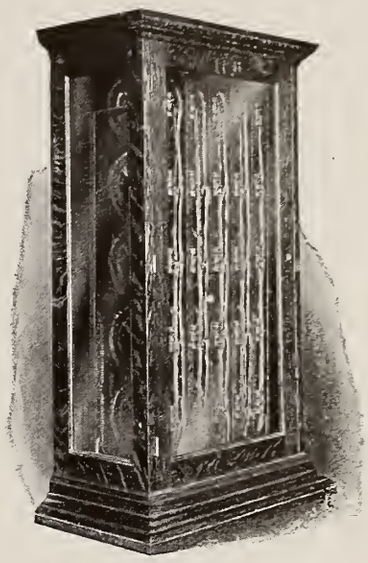
HUMIDIFIERS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES
Bawden Machine Co., Ltd., Toronto.

*For Display Advertisement See Index, Page 325

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INCUBATORS & BROODERS
Lee Mfg. Co., Ltd., Pembroke, Ont.

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Penberthy Injector Co, Ltd., Windsor, Ont.

INSULATED WIRE
*Canadian General Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

INSULATION, patent seamless cork
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS
Standard Clay Products, Ltd., St. Johns, Que.

IRON:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar
Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.
*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:
*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY
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JAM, canned goods, etc.
E. D. Smith & Son, Limited.

JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.

JOINTERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

JELLY POWDER
S. H. Ewing & Sons, Montreal. Que.

JEWELRY, enamelled souvenir
Caron Bros., Montreal, Que.

JEWELRY, gold filled
Caron Bros., Montreal, Que.

KELSEY WARM AIR GENERATOR
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:
*Sheldons, Ltd., Galt.

KINDLING
Standard Fuel Co., Toronto.

KNIFE GRINDERS:
*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:
*Penman's, Ltd., Paris, Ont.

KNIVES
*E. C. Atkins & Co., Hamilton.
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.

KRAFT, brown paper:
*The New Brunswick Pulp & Paper Mfg. Co., Ltd., Millerton, N.B.

LABELS
Lawson & Jones Ltd., London, Ont.

LABELS, lithographed
Harris Lithographing Co., Toronto.

LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
Sadler & Haworth, Montreal, Que.

LACE, leather:
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LAGER
E. L. Drewry, Winnipeg, Man.

LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:
Canadian Billings & Spencer Ltd., Welland.

LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.

LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD
* The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto.

LEAD PIPE
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER
The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole
The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather
A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.
Clarke & Clarke, Limited, Toronto.

LEATHER, upper
A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED TIN WARE:
*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Company. Ottawa, Ont.
Hough Lithographing Co., Ltd., Toronto.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited Toronto.
Rolph & Clark Ltd., Toronto.

LOCKERS:
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, decking and planking
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).

LUMBER, Douglas fir (Oregon pine)
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, long timbers and spars
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, pickets and lath
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, staves and heading
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, white pine
Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

MACHINERY, conveying.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
The Northern Crane Works, Ltd., Walkerville.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

MACHINERY, elevating.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
*Wm. & J. G. Greey, Toronto.

MACHINERY, elevating and conveying:
*Wm. & J. G. Greey, Toronto.

MACHINERY, flour mill:
*The Goldie & McCullough Co., Ltd., Galt.
*Wm. & J. G. Greey, Toronto.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY GUARDS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MACHINERY, hoisting, etc.
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.
*M. Beatty & Sons, Ltd., Welland, Ont.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, pumping
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, sawmill
*Canada Machinery Corporation, Ltd., Galt, Ont.
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene, Ont.
W. P. Plant, Hastings, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, special
Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery
W. P. Plant, Hastings, Ont.

MACHINERY, transmission
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

MACHINERY, wood working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Berlin Machine Works, Ltd., Hamilton.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:
*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting
Spramotor Co., London, Ont.

*For Display Advertisement See Index Page 325

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Canadian Carbonate Co., Ltd. Montreal, Que.

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*Dominion Paper Box Co., Ltd. Toronto.

MALT:
*Hiram Walker & Sons, Ltd., Walkerville.

MANTELS, wood
W. A. Moore Co., Ltd., Meaford Ont.

MAPS AND MAP MOUNTING
The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MATCHES:
*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned
The Wm. Davies Co.. Ltd.. Toronto.

MECHANICAL DRAUGHT
*Canadian Sirocco Co., Windsor, Ont.

MEDICINES, patented and pharmaceutical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
Alonzo W. Spooner, Limited, Port Hope. Ont.

METAL CEILING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd.. Preston.
*A. B. Ormsby, Ltd., Toronto.

METAL, spinning and stamping
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SASH:
*Trussed Concrete Steel Co. of Canada, Ltd.. Walkerville.

METAL SHINGLES:
*Metal Shingle & Siding Co., Ltd.. Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

METAL SIDING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*A. B. Ormsby, Ltd., Toronto.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS
Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)
Holt, Renfrew Ltd.. Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)
Holt. Renfrew, Ltd., Quebec, Que.

MONUMENTS
McIntosh Granite Co., Ltd., Toronto.

MORTISERS:
*Berlin Machine Works, Ltd.. Hamilton.
*Canada Machinery Corporation. Galt.

MOTOR CAR PARTS AND ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.
*Russell Motor Car Co., Ltd., Toronto.

MOTOR-DRIVEN GRINDERS
*The Ford-Smith Machine Co., Ltd.. Hamilton.

MOTORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd,. Hamilton.

MOTORS, D.C.
*Canadian Crocker Wheeler Co., St. Catharines. Ont.
*Northern Electric Co., Ltd., Montreal, Que.

MOTORS, electric (alternating current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co.. Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Gramm Motor Truck Co., Ltd.. Walkerville.

MOULDERS:
*Berlin Machine Works, Ltd.. Hamilton.
*Canada Machinery Corporation, Galt.

NAILS:
*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAME PLATES
Patterson and Heward, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NITROGEN
*L'Air Liquide Society, Montreal, Que.

NUTS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons. Aurora. Ont.
*Wm. & J. G. Greey, Toronto.

OFFICE STATIONERY:
*The Montreal Lithographing Co., Ltd., Montreal.

OILS
Brandram-Henderson, Ltd., Montreal. Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd.. Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS
S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES
Sheet Metal Products Co. of Canada. Ltd.. Toronto.

OIL STORAGE SYSTEMS, self measuring
S. F. Bowser & Co., Toronto.

OIL COMPANIES
Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)
*British American Oil Co., Ltd., Toronto.

OILS, Petroleum
*The Imperial Oil Co., Ltd.. Toronto.

OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd.. Montreal. Que.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

ORGANS
*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe
Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour
Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

ORNAMENTS (dress, fur, cloak, etc)
The Moulton Manufacturing Co., Limited, Montreal.

OSTRICH PLUMES
R. Parker & Co., Toronto.

OVENS, portable bake
Bedford Stove Co.. Bedford. Que.
*Wm. & J. G. Greey, Toronto.

OVERALLS
Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS
Rosamond Woollen Co., Aimonte, Ont.

OVERHEAD RUNWAYS.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont

OXYGEN
*L'Air Liquide Society, Montreal, Que.

PACKING BOXES
Barchard & Co., Ltd., Toronto.

PACKING, engine:
Garlock Packing Co., Hamilton.

PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.

PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Brandram-Henderson, Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge
Standard Paint and Varnish Co., Ltd.. Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island, Que.

PAPER
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER BOARDS
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book
Barber Paper & Coating Mills, Ltd.. Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, cover
Barber Paper & Coating Mills, Ltd. Georgetown, Ont.

PAPER, envelope
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co., Montreal. Que.

PAPERS, building
*The Riordon Pulp and Paper Co., Montreal. Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, carbon
*Peerless Carbon and Ribbon Mfg. Co., Ltd., Toronto.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, coated box board
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd.. Georgetown, Ont.

PAPER, enamelled blotting
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd.. Georgetown, Ont.

PAPER, genuine Canadian kraft, glazed and unglazed
*The New Brunswick Pulp and Paper Co., Ltd., Millerton, N.B.

PAPER, label
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, ledger
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, wall
Stauntons, Ltd., Toronto.

PAPER, writing
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*Rolland Paper Co., Ltd., Montreal, Que.

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*Dominion Paper Box Co., Toronto.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Limited. Stratford, Ont.

*For Display Advertisement See Index, Page 325

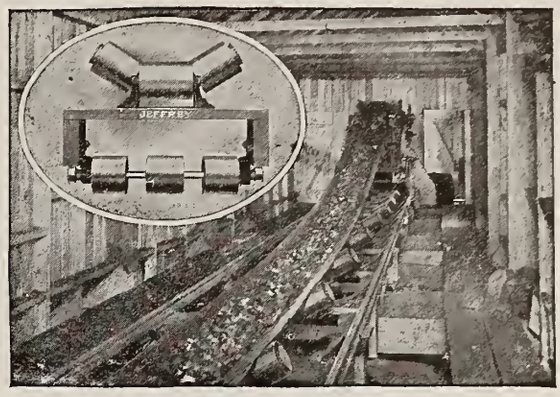
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PIANO, player actions
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PRESSES, Filter
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R. G. McLean, Toronto.

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*Southam Press, Ltd., Toronto and Montreal.

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*Bawden Machine Co., Ltd., Toronto.

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*Bawden Machine Co., Ltd., Toronto.
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*Metal Shingle & Siding Co., Ltd., Preston.

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*Canada Machinery Corporation, Galt.

SAWS, circular mill:
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*For Display Advertisement See Index, Page 325

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McClary Mfg. Co., London, Ont.

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*Canadian Steel Foundries, Ltd., Montreal, Que.

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*Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

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*Butterfield & Co., Rock Island, P.Q.

TAP WRENCHES
*Butterfield & Co., Rock Island, P.Q.

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*Northern Electric Co., Ltd., Montreal, Que.

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*The Canadian Independent Telephone Co., Ltd., Toronto.
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*For Display Advertisement See Index, Page 325



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THUMB SCREWS:
*Canadian Billings & Spencer, Ltd., Welland.

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Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TIMBER:
*The B.C. Mills Timber & Trading Co., Vancouver, B.C.
James Sheppard & Son, Sorel, Que.

TIME CLOCKS
*International Time Recording Co., Toronto.
*W. A. Wood, Montreal.

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McClary Mfg. Co., London, Ont.

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Sheet Metal Products Co. of Canada, Ltd., Toronto.

TIRES, cycle, auto and truck.
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*Goodyear Tire & Rubber Co., of Canada, Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

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*The Ford-Smith Machine Co., Ltd., Hamilton.

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*Canadian General Electric Co., Ltd., Toronto.

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*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing
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Brown Boggs Co., Ltd., Hamilton, Ont.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton, Ont.

TRANSMISSION MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

TROLLEYS.
The Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont.

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The Gurney Scale Co., Hamilton, Ont.
*Wm. & J. G. Greey, Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford.

TRUNKS
Lamontagne Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal, Que.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

TUBING, Brass and Copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Canadian Seamless Wire Co., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

TUBING, Gold and Silver
Canadian Seamless Wire Co., Toronto.

TURBINES, water.
*Canadian Allis-Chalmers, Limited, Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*International Engineering Works, Ltd., Amherst, N.S.

TURBINES, steam:
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
*International Engineering Works, Ltd., Amherst, N.S.

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*The Bawden Machine Co., Limited, Toronto.

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Rosamond Woollen Co., Almonte, Ont.

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Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
Pratt and Whitney Co., of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

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*United Typewriter Co., Toronto.

TYPEWRITER RIBBONS
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

UNIONS, iron pipe connections
*Otterville Mfg. Co., Ltd., Otterville, Ont.

UNDERWEAR TRIMMINGS
The Whitby Braid & Edging Co., Woodstock, Ont.

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*Canadian Fairbanks-Morse Co., Ltd., Montreal.
Jenkins Bros., Ltd., Montreal, Que.

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*Ault & Wiborg Co. of Canada, Ltd. Toronto.
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*Dougall Varnish Co., Ltd., Montreal.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal.

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*The Goldie & McCullough Co., Ltd., Galt.

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VENTILATORS:
*A. B. Ormsby, Ltd., Toronto.
*John T. Wilson & Co., Toronto.
*Geo. W. Reed & Co., Montreal.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

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WHEELS, emery
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*For Display Advertisement See Index Page 325

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ST. JOHN HALIFAX

Vol. XV., No. 5 DECEMBER, 1914 $2.00 per Year

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SIR GEORGE FOSTER PRAISED BY ONTARIO FRUIT GROWERS

His Enterprise in Advertising Canadian Apples Resulted in Greatly Increased Home Consumption

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"That this Association desire to express their appreciation of the enterprise of Sir George E. Foster, Minister of Trade and Commerce, in advertising throughout Canada the merits of the Canadian apple, with a view to its increased home consumption.

"That in the opinion of this Association the campaign has increased the domestic consumption of the Canadian apple, and that the Department be asked to continue the campaign next year."

The now famous "Apple Campaign" was planned, written and placed by

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The D. McKenzie Machinery Company

GUELPH, ONTARIO

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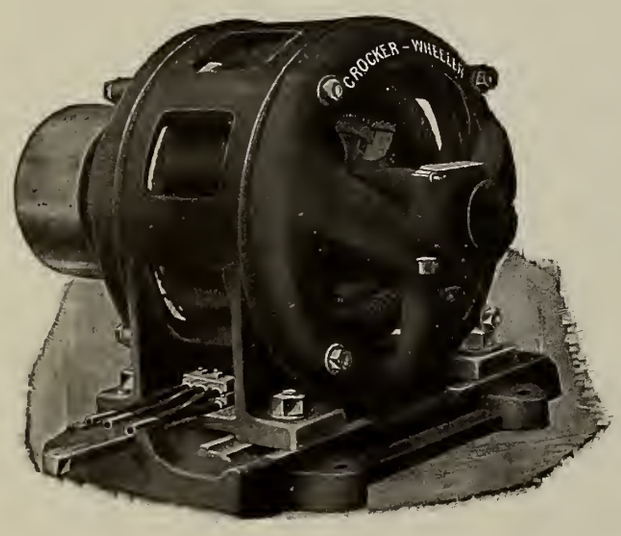
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THE MADE IN CANADA MOVEMENT

There has been a national awakening to the importance of MADE IN CANADA. The manufacturers, in many cases, are running their mills day and night to supply the eight million Canadian Consumers, and to replace, as far as possible, the merchandise formerly imported from other countries.

The Canadian people are assuming a national pride in MADE IN CANADA products, and soon much of the gaudy, shoddy, counterfeit merchandise which formerly found its way into the country, will be forever banned and barred.

The fatuous policy of purchasing merchandise from the factories of foreign countries, giving employment to foreign workers, and adding to the wealth of foreign nations, while Canadian workers are unemployed, is being superseded by the Made in Canada policy, the culmination of which will be a mighty industrial expansion and development, and a vast increase in employment, wealth and prosperity.

THE
Canadian Street Car Advertising Co.,
LIMITED

MONTREAL TORONTO WINNIPEG

New Condulets—PG and ZG Series

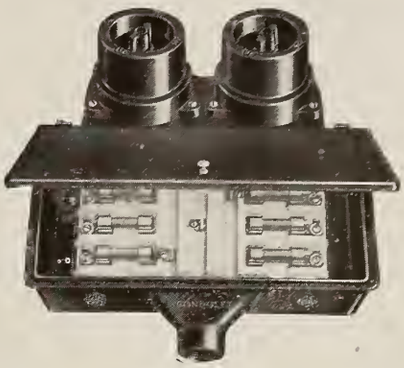


Type PG
With Protective Snap Switch Mounted.

Especially designed for use in Textile Mills.

Take Snap Switch with Protective Cover.

ZG Series Condulets also Take Cut-outs.



Type ZGU
With Protective Snap Switches and Cut-out Mounted.



Type PG.



Type PGC.



Type PGG.



Type ZGC.



Type PGCA.



Type PGB.



Type ZGU.



Type PGT.



Type PGL.

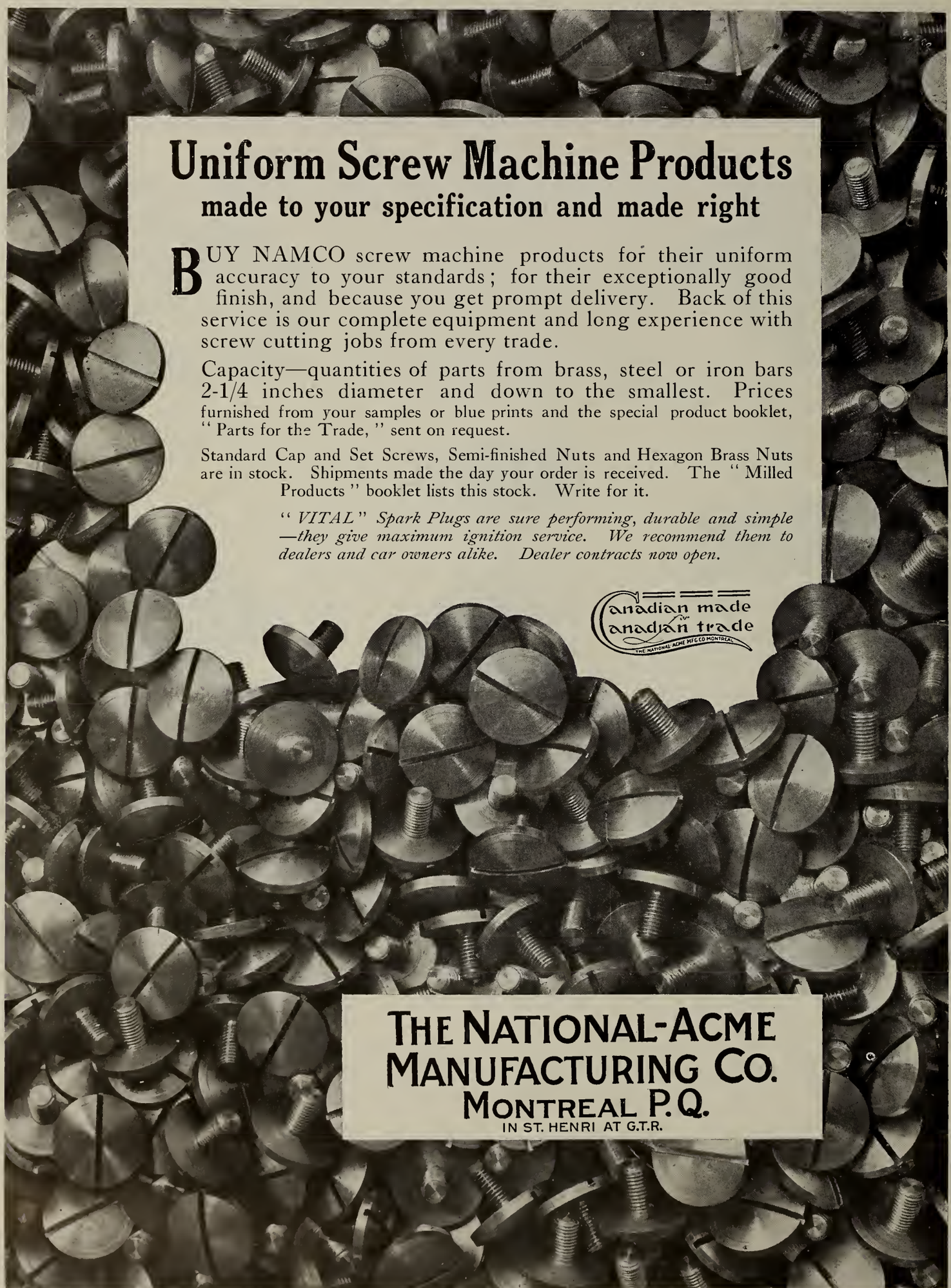
Order from your jobber. If he does not stock them, write us.

Complete and Fully Illustrated Catalogs Upon Request

CROUSE-HINDS CO. OF CANADA, LIMITED

Main Office and Works:

TORONTO, ONTARIO, CANADA


Uniform Screw Machine Products
made to your specification and made right
BUY NAMCO screw machine products for their uniform accuracy to your standards; for their exceptionally good finish, and because you get prompt delivery. Back of this service is our complete equipment and long experience with screw cutting jobs from every trade.
Capacity—quantities of parts from brass, steel or iron bars 2-1/4 inches diameter and down to the smallest. Prices furnished from your samples or blue prints and the special product booklet, "Parts for the Trade," sent on request.
Standard Cap and Set Screws, Semi-finished Nuts and Hexagon Brass Nuts are in stock. Shipments made the day your order is received. The "Milled Products" booklet lists this stock. Write for it.
"VITAL" Spark Plugs are sure performing, durable and simple —they give maximum ignition service. We recommend them to dealers and car owners alike. Dealer contracts now open.
Canadian made
Canadian trade
THE NATIONAL ACME MFG CO MONTREAL
THE NATIONAL-ACME MANUFACTURING CO.
MONTREAL P.Q.
IN ST. HENRI AT G.T.R.

We Are Ready for War

Can supply every Canadian Manufacturer and Jobber with their entire requirements of Steel and Brass Compression GREASE CUPS, Plain, Ratchet or Leather Washer, Types any finish desire d. Also al styles of Oil Hole Covers.

A NEW ONE



Hinge Lid Pressed Brass Oil Cup

With Syphon Feed, if desired. No order too large to ship from stock. Anything special you have been importing we will gladly make to your order. If your Jobber can't supply you with WINKLEY Cups write us for prices and Catalogue.

CANADIAN WINKLEY CO., LTD.
WINDSOR, ONTARIO

BUYING

Made-in-Canada Goods

keeps Canadian factories busy and their employees prosperous.

Conversely—

Buying foreign goods keeps Canadians idle.

Last year Canada bought more than a million dollars' worth of foreign-made goods per day.

That milk is spilled. Let us not cry over it.

This year's milk is still in the pail.

Let us not spill it.

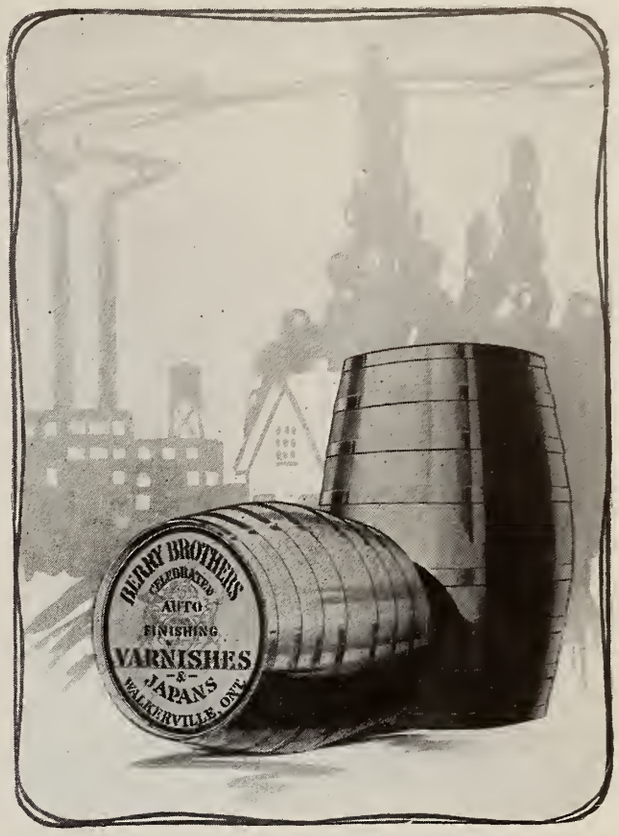
When you need DRILLS, buy WILT DRILLS.

They are MADE-IN-CANADA and—they are as good as any drills made anywhere.

Ask your jobber, or write us.

The Wilt Twist Drill Co.

of Canada, Limited
WALKERVILLE - - - - ONTARIO



Quantity Production in *Your* Varnish Shop

Are *you* sure that *your* varnish shop is turning out the greatest number of jobs possible for the money you are now paying?

Are *you* sure that the jobs that are now leaving *your* shop are finished up to as high a standard as they should be for the cost per job?

If you are *not sure* of the efficiency of *your* shop on these two vital points

Ask the Berry Salesman

the next time he calls how you *can* be *sure.*

Ask him to take a survey of your shop and see where you can increase your production without increasing the cost—or increase the quality of your work without increasing your finishing costs.

Here is a varnish expert representing a firm that has made varnishes of highest quality for over 56 years.

The advice and counsel of Berry Brothers' experts is yours for the asking—no matter how large or small your use of varnish may be.

BERRY BROTHERS
(INCORPORATED)
World's Largest Varnish Makers
Established 1858 **Walkerville, Ont.**

SOUTHAM PRESS LIMITED

"Direct by Mail" Advertising

DIRECT-by-Mail Advertising is conceded by experts to be the most effective result producing business getter at the command of the enterprising business man.

And Direct-by-Mail Advertising (the best kind) is printed matter—plus good workmanship—plus brains. It comprises catalogs—booklets—brochures—circulars—hangers—calendars—poster stamps—house organs—business stationery and in fact every printed thing.

If you want results stop buying "just printing." Tell us what result you want to accomplish and let us suggest for you a "direct-by-mail" advertising campaign.

We will do the whole thing from the conception of the idea to the mailing (if you wish).

Ask us for samples of some things we have done.



Headquarters for tags—gummed stickers—seals—tickets and labels.

Southam Press Limited

Montreal :: Toronto

DENNISTEEL
LONDON - CANADA

EVERYTHING in its proper place. Amount of stock on hand quickly ascertained. No delay, no confusion. How much waste in material and time would such a system save *you*?

The picture here shows one section of our modern steel shelving installed in the Michigan Central Shops at St. Thomas, Ont. This is the modern storage method.

DENNISTEEL shelving and racks are made of high-grade steel. They are strong and durable, adjustable to any shape or size of material and will not rot, bend or crack. They occupy less of your valuable floor space than wood. You can take them down from one place and erect them in another without breakage and at a very low cost for labor. They won't burn but rather are added fire protection. And don't forget they are adjustable because of their unit system of construction. No matter what form your products take, our shelving can be adapted to your storage requirements.

An interesting story is the advantages of DENNISTEEL. Why not let us discuss *your* storage problems. We will gladly do it without obligation on your part. You want economy. You want efficiency. We can show you how to attain both in tnis department.



THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON
CANADA

MAKERS IN CANADA OF
Steel Shelving, Steel Bins, Steel Racks, Steel Tables and Benches, Steel Tote and Assembler's Boxes, Steel Chairs and Stools, Steel Wardrobe and Material Lockers, Steel Partitions



MADE IN CANADA

THE HEATING SEASON IS UPON YOU

Complete Sirocco Heating Apparatus was produced and shipped from Windsor in three days for the factory of

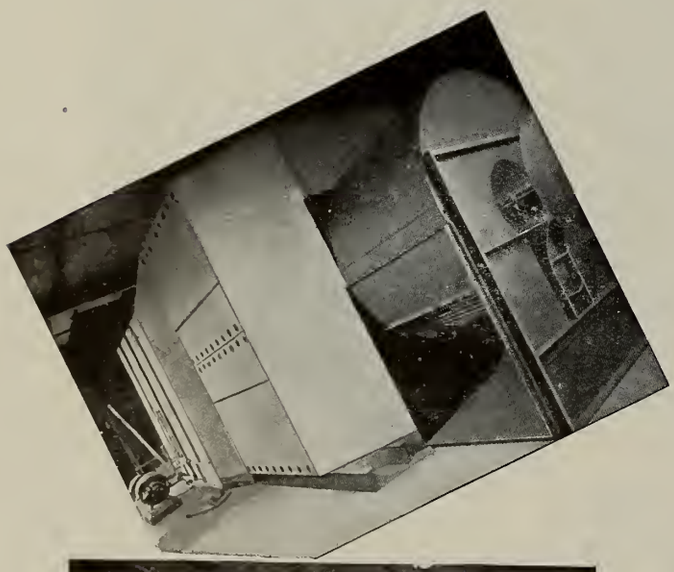
H. J. Heinz Co.
Leamington, Ontario

Send an inquiry to the Sirocco Engineering organization and get action right away.

DON'T delay further in contracting for that Heating System.

Without an effective system installed and ready to operate some ***cold*** and ***inefficient*** days will result.

Uncomfortable atmospheric conditions in an industrial plant impair production.





Entire heating apparatus centrally located and quickly assembled.

HOT "Sirocco" TRADE MARK BLAST HEATING SYSTEM

can be ***installed in less time*** than any adequated direct radiation apparatus and usually ***at a lower cost.***

Positive heat distribution from a centralized plant, backed by a ***positive*** guarantee of sufficiency—and the ***positive*** satisfaction of many large Canadian users (names upon request).

We are ready ***now*** to figure an efficient heating and ventilating system for you.

Send in blue prints and details to Home Office or nearest Sales Engineering Office.

CANADIAN Sirocco COMPANY LIMITED
WINDSOR. ONTARIO.

SALES ENGINEERING OFFICES.

S. S. CLARKE
605 2nd Street, Calgary

C. T. MORSE
43 Victoria Street, Toronto

SALES ENGINEERING OFFICES.

A. M. NICHOL
301 McGill Bldg., Montreal

W. P. EDDY
301 Tribune Bldg., Winnipeg

VICTOR Blade

Canadian Made

The **only** hack saw blade made in the Dominion.



Take a gross of the best all hard hand blades. Keep a careful record of how long they last and how much material they cut.

Take a gross of VICTOR Flexibles. Compare their performance on the same kind of work.

You'll find the VICTOR Flexibles cut more—40 per cent. to 60 per cent. more.

You'll find the average time per cut much less with VICTOR Flexibles.

Yon'll find 9 out of 12 of the all-hards break before worn out in the average user's hands.

You'll find **every** VICTOR Flexible gives **full** service.

You'll find 7 to 8 VICTOR Flexibles will do the work of 12 all-hards.

You'll find — to say nothing of wages saved on cutting, and through having no broken blades to replace — that

VICTOR Flexibles

save 37½%

We also make VICTOR All-Hard Hack Saws and VICTOR Power Hack Saws

Glad to send sample blades, free of charge, if you will advise us length of blades and what kind, size and shape of material you are cutting.

VICTOR
SAW WORKS, LTD.
Hamilton, Ontario

· KAWNEER · PRODUCTS ·

· METAL · MOULDINGS ·

We manufacture cold rolled hollow metal mouldings in copper, brass, bronze and steel. These mouldings are used in the construction of buildings as well as in metal furniture, automobiles, railway coaches, casement windows and constructions of that nature. Our metal mouldings are true in every respect. All curvatures and angles are uniform and exact — true to design; the surfaces of these mouldings are smooth and finished — no rough spots or pits such as are found on mouldings produced by the press or brake. We can produce any shape of any of the above metals in any length desired.

· WELDED · (SEAMLESS) · STEEL · TUBING ·

Our tube mill is completely equipped to manufacture cold rolled welded steel tubes of any design —round, square or irregular — any length desired.

SEND FOR OUR CATALOGUE

It contains details of the hundreds of shapes we have made. You will then readily appreciate the wonderful advantages and possibilities of this work.

Kawneer
Manufacturing Company
Limited
Francis J. Plym, President

Kawneer STORE FRONTS

GENERAL OFFICES & FACTORY
GUELPH, ONT.

Metal Molding for Exposed Wiring



"National" Metal Molding used with exposed wiring insures safety. It protects wiring from damage. And as an added insulation it protects machinery from contact with electrical current. It

Insures Safety and Satisfaction

Where appearance is a factor "National" Metal Molding solves the problem. It is especially adapted for metal ceilings, show windows, show cases and theatre wiring.

It is rust-proof and so designed that it is easily installed.

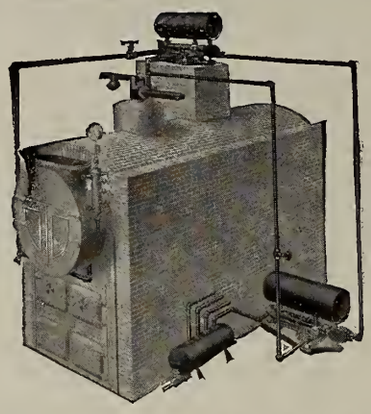


Write our nearest branch for illustrated descriptive literature.

Northern Electric Company
LIMITED

Manufacturer and Distributor of Telephone and Fire Alarm Apparatus and Electrical Supplies for every possible need.

Montreal	Halifax	Toronto	Winnipeg
Regina	Calgary	Edmonton	Vancouver



HOW MUCH COAL DO YOU WASTE?

Is your plant losing 10 to 15% of the coal pile every day through condensation losses? If such is the case, do you know that you can save every ounce of that condensation and every heat unit represented? You can save it with the

Morehead

Back to Boiler

SYSTEM

Made in Canada

a system that drains perfectly any kind of steam apparatus and returns the condensation drained back to the boiler **at its initial temperature** for use as feed water. Operates under any pressure—high, low or vacuum.

Don't experiment any longer with the ordinary trap. Don't depend upon those pumps, because the best average pump cannot handle water over 200 deg. F. against the "Morehead way" of 300 deg. or even more.

Our Engineers will show you how the Morehead System will cut out the waste in your plant. Write them —today.

Canadian Morehead Manufacturing Company

Woodstock 250 **Ontario**



The Season's Greetings

Grey Iron Castings

The kind *we* use
There are no better

Why We Sell Castings

¶ When we commenced making furnaces we had a trade in grey iron castings which was second to none in Canada.

¶ Our furnace trade grew so rapidly that during the past few years our foundry was kept busy with our own requirements.

¶ And one reason for the popularity of our furnaces was the sterling quality of our castings.

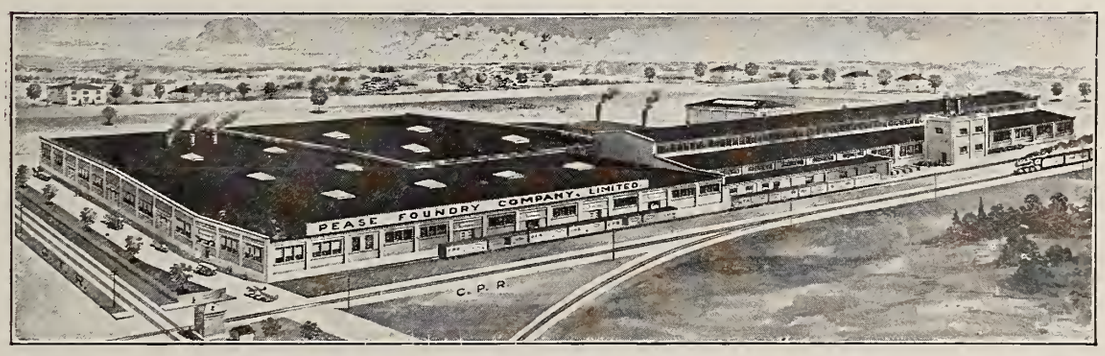
¶ With our new plant at Brampton (see cut below), our facilities for turning out Grey Iron Castings enable us once more to fill orders for the public.

¶ In quality the output of our foundry is unsurpassed.

¶ We can give prompt delivery.

WRITE FOR QUOTATIONS

NEW PLANT AND WAREHOUSE, BRAMPTON, ONT



PEASE FOUNDRY COMPANY, LIMITED.

HEAD OFFICE: TORONTO

WORKS: BRAMPTON

EXPORT

Direct Representation for Canadian Manufacturers

Offices and Showrooms in the following Cities:

London England
14 FINSBURY COURT, FINSBURY PAVEMENT

Melbourne Australia
PENFOLD HOUSE, 114-116 QUEEN STREET

Auckland New Zealand
34 FORT STREET

Christchurch New Zealand
MANCHESTER STREET

Buenos Aires Argentine
32 FLORIDA

HEAD OFFICE:

IMPERIAL EXPORT COMPANY, Limited

Lumsden Bldg., Corner Adelaide and Yonge Streets, TORONTO

NICHOLSON MADE

THAT "RUSH" JOB

—whether shop or road repair—demands good work in the shortest time.

Probably it means lots of filing—and that in turn means use more

NICHOLSON-MADE-FILES

In Railway and Marine service NICHOLSON-MADE-FILES have long been noted for the **quantity** and **quality** of their work.

Yet both can be substantially increased—by the use of **two** files where only **one** is now used.

It's positive economy in filing to discard a file when half-worn. The increase in turn-out and workmanship repays the slight extra file-cost many-fold—and establishes a new low-level for your filing costs.

A trial of this plan in your own shops—with NICHOLSON-MADE-FILES—is the very best proof we can suggest.

BRANDS:

KEARNEY & FOOT GREAT WESTERN
AMERICAN ARCADE GLOBE

Nicholson File Co., Port Hope, Ont.

N

ASBESTOS

WE CARRY THE LARGEST COMPLETE STOCK IN CANADA

ASBESTOS SHINGLES
ASBESTOS LUMBER
ASBESTOS MILLBOARD
ASBESTOS PAPER
ASBESTOS PACKING
ASBESTOS ROOFING
ASBESTOS PIPE COVERING
ASBESTOS CEMENT
ASBESTOS CURTAINS

CANASCO RUBBER ROOFING 1, 2 AND 3 PLY
COTTON WASTE, WHITE AND COLORED, AND WOOL WASTE
OAKUM, PLUMBERS AND NAVY
BEAVER BOARD
RAILWAY AND ENGINEERS' SUPPLIES

WE EMPLOY A LARGE STAFF OF EXPERIENCED WORKMEN AND UNDERTAKE THE COVERING OF STEAM PLANTS AND COLD STORAGE ANYWHERE IN CANADA.

CANADIAN ASBESTOS COMPANY

42 TO 48 YOUVILLE SQUARE MONTREAL MAIN 332 AND 611



GAMEWELL Factory Fire Alarms

BREAKING A GLASS PANEL OPENS THIS DOOR — EXPOSING THE LEVER —

THERE IS

No Key to Get Lost

The box is protected from malicious or mischievous persons, for the glass must be broken before an alarm can be sounded.

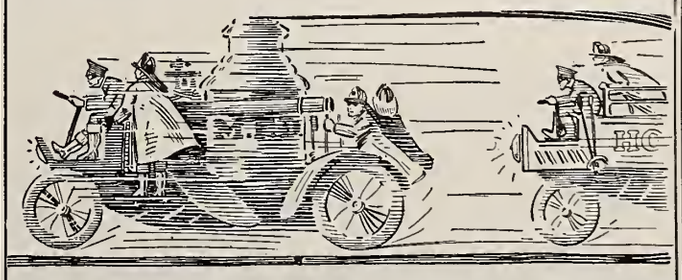
This box is a product of the factory that has made 97 per cent. of the fire alarm systems for the biggest cities on the continent. It has the latest design in factory fire alarms.

Our nearest house will be glad to send a man to help you select the Fire Alarm System best suited to your factory's requirements.

Northern Electric Company
LIMITED

Makers of the Nation's Telephones

MONTREAL WINNIPEG EDMONTON
HALIFAX REGINA VANCOUVER
TORONTO CALGARY VICTORIA



ATTENTION, MANUFACTURERS

The "Made in Canada" Idea is Astir!

Dodge Transmission Machinery

is Made in Toronto!

And is equal in quality to the **best made** in any country. This statement holds good throughout our entire line. We invite any power user anywhere to show us **better**

Transmission Machinery

than we make. In spots there are excuses for buying machinery not made in Canada —but this does not apply for a minute in our case—so if you **specify** and get **Dodge Transmission Machinery,** you will get as good as there is, and at same time support the cry **"Made in Canada."**

Ask for Our New Catalogue

DODGE MANUFACTURING CO., LIMITED
TORONTO · MONTREAL

Russell Cars Guarantee



Quality Service AND Value

For every dollar you *invest* in a RUSSELL, you get a dollar of *tangible* value. $1,000 duty cannot add one cent of worth. You get *more*. You *pay less*. You help develop a Canadian industry. You increase Canada's prosperity. The production of Russell cars gives employment to 1,500 men. Requires $2,000,000 worth of material yearly. Distributes over $1,000,000 in wages to Canadian mechanics.

More Beautiful

Latest European stream-line bodies. New domed fenders. Concealed door-hinges. Clean running-boards. Double head-lights. Lasting lustrous finish. Spare tires at rear.

Full Equipment.—Highest quality top. Built-in, rain-vision, ventilating windshield. Demountable rims. Spare rim. Warner speedometer. Clock Electric horn, etc.

More Comfortable

Perfectly-balanced chasses. Long three-quarter-elliptic rear springs. Ample wheel-base. Big wheels. New proven two-unit electric starting and lighting system. New instrument board (complete control at finger tips). Left side drive. Centre control. Quick acting Collins side-curtains, opening with doors, and adjustable from seats.

More Efficient

Latest-type, long-stroke, smooth-running, high-efficiency engines. More power—less weight. Saving of fuel, oil and tires. Newest type ignition. Chrome nickle-steel gears and shafts. Cleverly designed chasses. Light, strong, heat-treated steels. Full-floating rear axle. Worm bevel gears. Double dust-proof brakes. Very low operative cost per mile.

Five reasons why YOU should drive a Russell "Made in Canada" Car:

1st: The highest-quality car—at the lowest price.
2nd: Built of finest materials—by expert workmanship. Fully guaranteed and backed by service stations from coast to coast.
3rd: Made in Canada—by Canadian workmen—in a Canadian-owned-and-operated plant.
4th: Most comfortable—easiest-riding—smoothiest-running car built.
5th: A vital unit in Canadian industry—whose success helps to build up Canadian prosperity—which in turn helps YOU.

Ride in a RUSSELL today. Performance proves its worth.

Agency applications invited in open territory. *"6-30"--$1750 "4-32"--$2650 "6-48"--$4500* *Catalogue and full descriptive matter on request.*

RUSSELL MOTOR CAR CO., Limited

WORKS AND EXECUTIVE OFFICES: WEST TORONTO
Branches: Toronto, Hamilton, Montreal, Winnipeg, Calgary, Vancouver

Goold, Shapley & Muir Co.

LIMITED

BRANTFORD : WINNIPEG : REGINA : CALGARY

MANUFACTURERS OF

GAS AND GASOLINE ENGINES

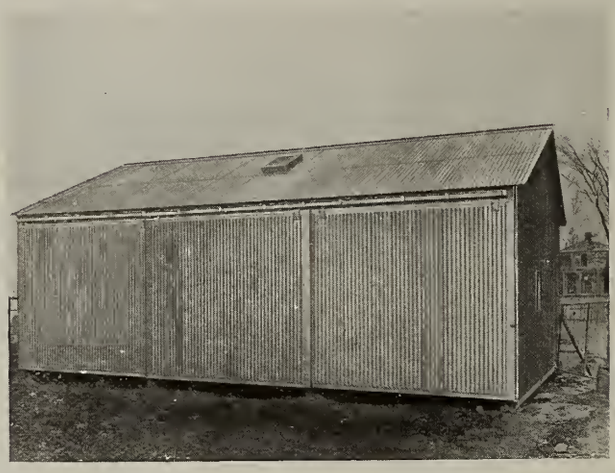


TANKS
AND
TOWERS
FOR
Sprinkler Systems
TOWN WATER SUPPLY
ETC., ETC

PUMPS
CONCRETE MIXERS
HOISTS, Etc.

Write, if interested

MANUFACTURERS' STORAGE BUILDINGS



Heavy steel frame covered with Acorn quality corrugated iron.

All cut and ready to put together at our factory. Two men can erect a building in a few hours' time.

If you need fireproof storage space, send for our booklet "Ready-made Buildings."

THE METAL SHINGLE & SIDING CO., Ltd.
PRESTON, ONTARIO

JULIUS COHEN & JOSEPHY

BRADFORD BERLIN TOURCOING BOSTON

FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. *Write for prices to*

H. V. ANDREWS, Canadian Representative **32 Church Street, Toronto, Canada**



Canadian Plant
Chicago Bridge & Iron Works
Bridgeburg, Ontario

ELEVATED STEEL TANKS AND STANDPIPES

For Municipal, Railroad and Factory Service

We also build Oil Tanks, Coaling Stations, Bridges, Turntables, Buildings and Structural Material. Write for illustrated Catalogue No. 25.

OFFICES:

BRIDGEBURG, ONT. Can. 121 Janet St
Chicago, Ill. 1316 W 105th St.

SHOPS:

BRIDGEBURG, ONTARIO
Greenville, Pa. (Pittsburg District)
Chicago, Illinois

NOTICE

To Manufacturers, Dealers and Users of Steam Boilers.

All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.

HON. FINLEY G. MACDIARMID, Minister of Public Works.
D. M. MEDCALF, Chief Inspector of Steam Boilers.



By Royal Warrant

"Canadian Club" Whisky

Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

Distilled and Bottled by

HIRAM WALKER & SONS
LIMITED

Walkerville, Canada

LONDON CHICAGO NEW YORK MEXICO CITY VICTORIA, B.C.

Gramm Moving Van



Gramm Moving Van

Owned by J. T. BURROWS, "The Mover," Brantford, Ont.

Mr. Burrows writes us as follows: "Last week we went to Oshawa, Ont., a distance of 106 miles one way, or 212 miles on our job, moving the entire household effects of a six-roomed house, well furnished, in the short space of 23 hours actual time, including loading at Oshawa. Now, I must say that I am well satisfied with the truck, and I am breaking all records for long distance movings that have ever happened in Brantford in my twenty-third year in the carting and teaming business."

Gramm Trucks are made in capacities of 1 ton, 2 tons, 3½ tons and 5 tons
EXPORT DEPT. for EXPORT BUSINESS, furnishing Catalogs in English and Spanish

The Gramm Motor Truck Co. of Canada Limited "Truck Makers Exclusively" WALKERVILLE, ONTARIO

CANADIAN TUBE & IRON CO., LIMITED

MONTREAL, CANADA

Ask Your Jobber for

WROUGHT PIPE BLACK AND GALVANIZED 1/8 TO 4 INCH

Thoroughly inspected and tested
to 600 lbs. pressure and branded.

CT Brand

Also BOLTS, NUTS, RIVETS—All Kinds

SELLING AGENTS:

Canadian Rolling Mills Co., Limited

BAR IRON AND STEEL

Colonial Wire Mfg. Co., Limited

WIRES, WIRE NAILS, WOOD SCREWS, ETC.

WORKS: LACHINE CANAL MONTREAL, CANADA

HOW DOES YOUR PRODUCT LOOK WHEN IT ARRIVES AT ITS DESTINATION?

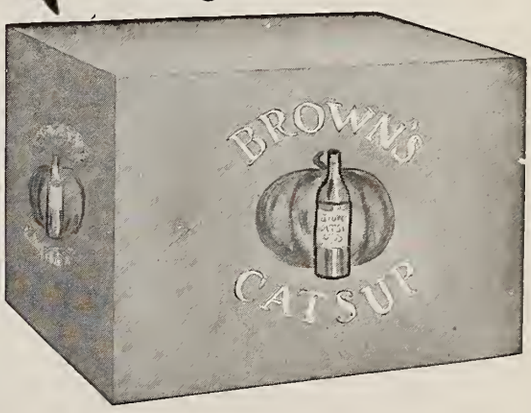
Do you want it to reach your customer or agent in a battered, splintered case, bruised and damaged—do you want your customer to get that kind of first impression? Do you like to be always negotiating over the replacement of damaged goods and return freight charges?

H. & D. Corrugated Board Fibre Boxes

Or do you want your product to arrive in a condition that will draw further trade instead of repulsing it? Clean and fresh—just as attractive as when it was packed? Don't you want your printed label on the package to be fresh and readable and the consignee's name perfectly legible and intelligible?



will protect your shipment against water, damp, damage—and the goods will be removed by your customer in just as good condition as when packed. Wood has become so expensive that it is not economy to use it for packing cases. But even if H. & D. Corrugated Fibre Board Boxes were not cheaper, they would still be vastly superior for any package weighing less than 100 pounds. Although they cost less and are a great deal lighter, they are five times as strong and have greater carrying power. The cellular construction of the board makes the cases so resilient that they will stand most extraordinary rough handling and abuse.



Trim Down Your Freight Bills

Save on each shipment the unnecessary expense occasioned by the greater weight of wood. H. & D. Corrugated Fibre Board Boxes will help you to make this saving and will put the shipment into your customer's place of business in better condition. Not only do the contents of the case go better in H. & D. Corrugated Fibre Boxes, but the box itself with its attractive monogram in colors, retains its freshness and attractive appearance when a wood box would be cracked and battered and not fit to be receipted for at the customer end.

Write us what you ship and ask for our free booklet "How to Pack It." We want to prove to you that you need H. & D. Corrugated Fibre Board Boxes in your business.

Let Us Design a Sample For Your Product

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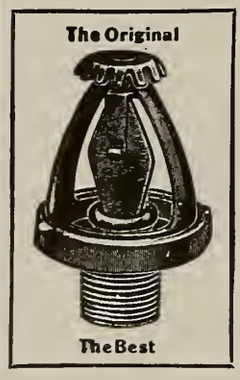
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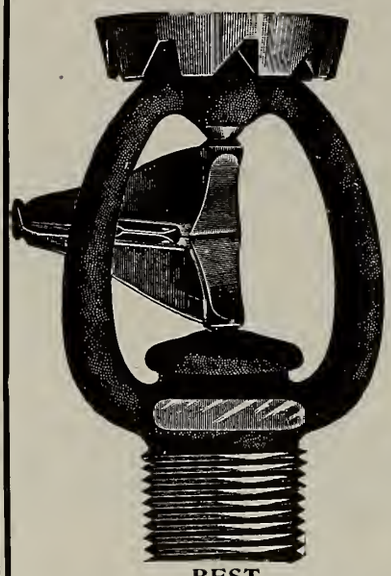


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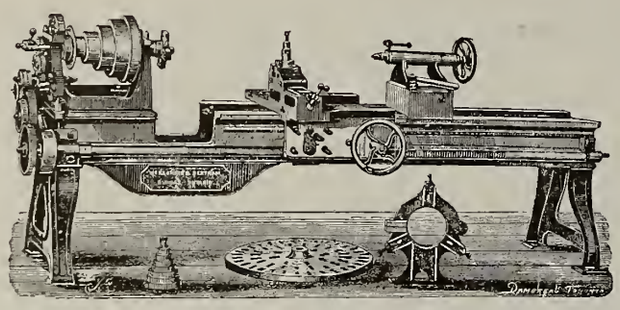
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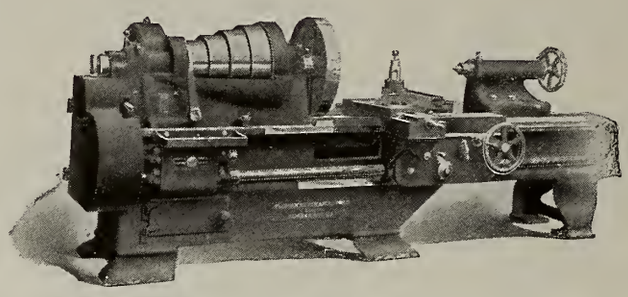
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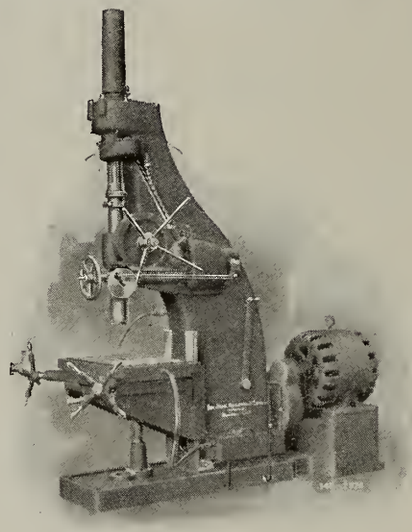
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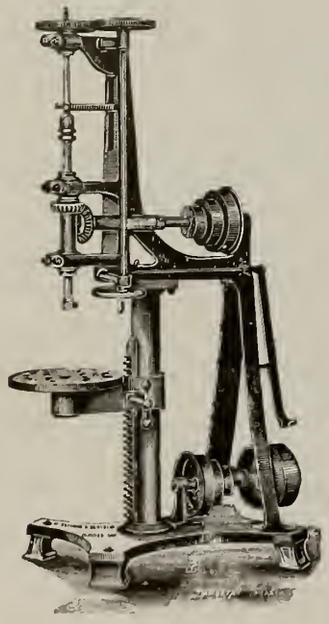
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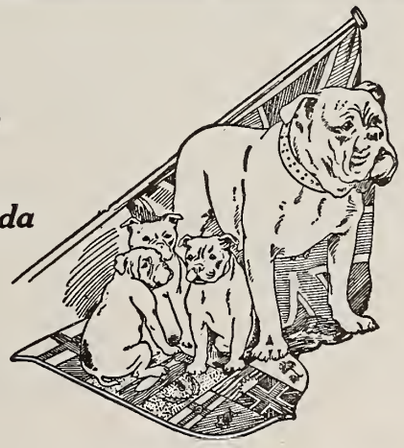
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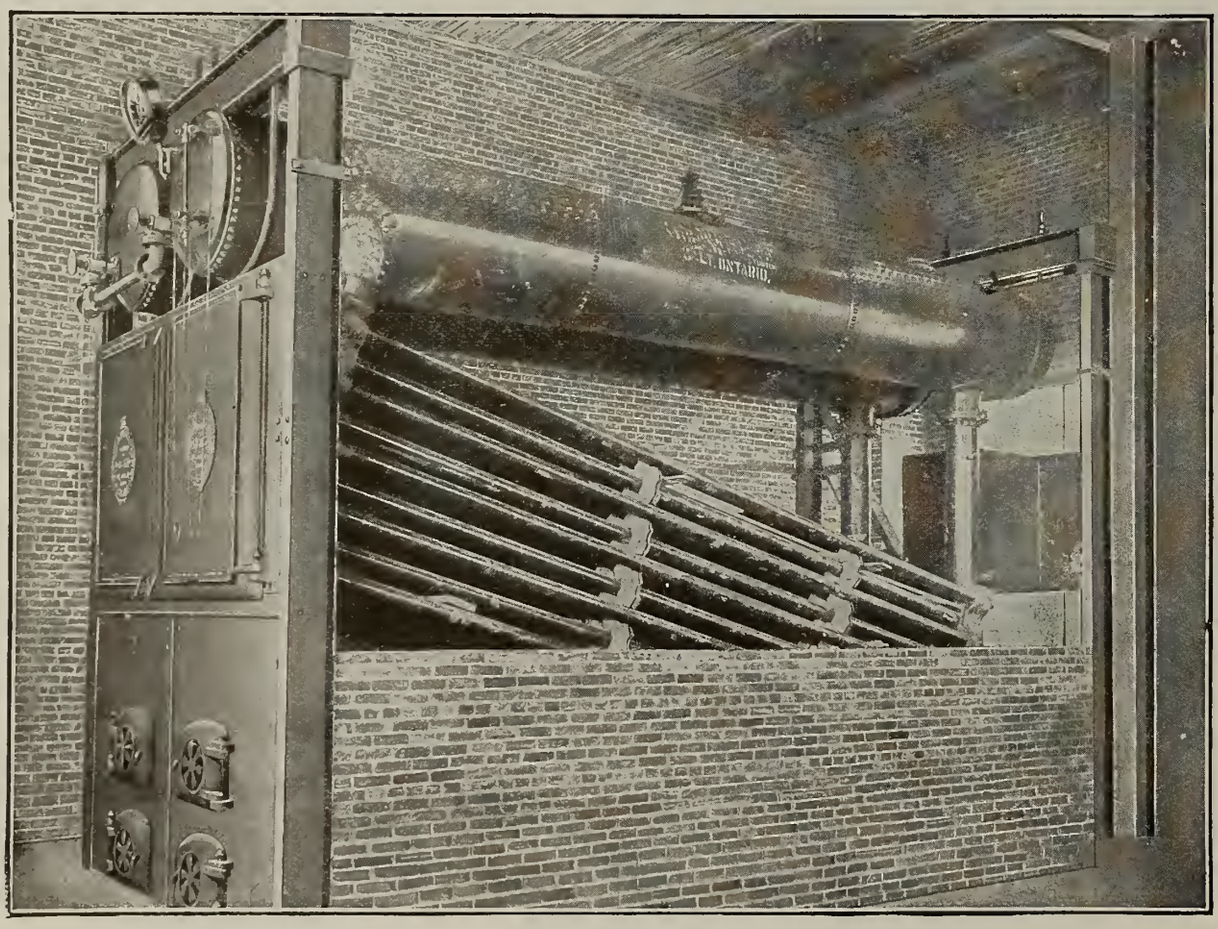


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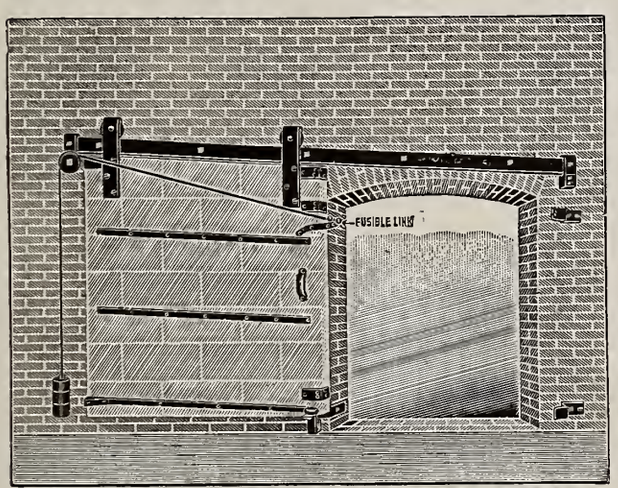
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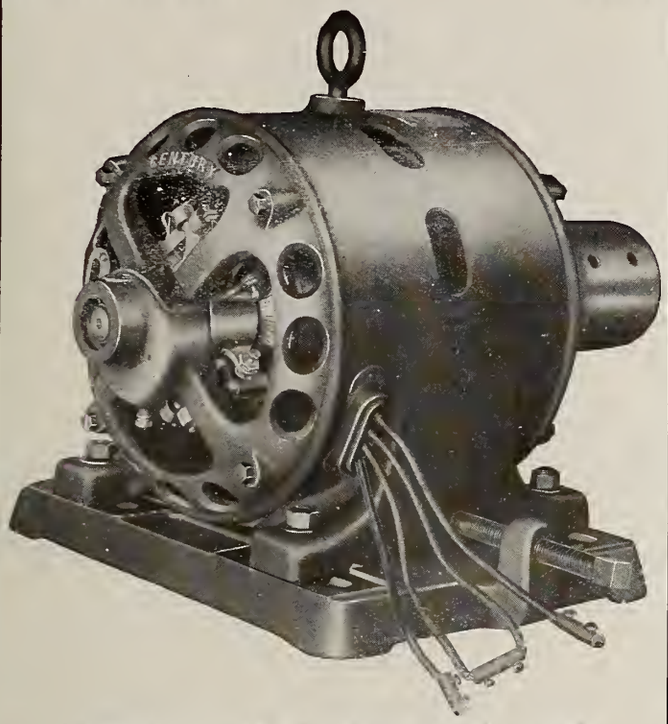
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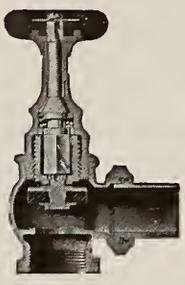
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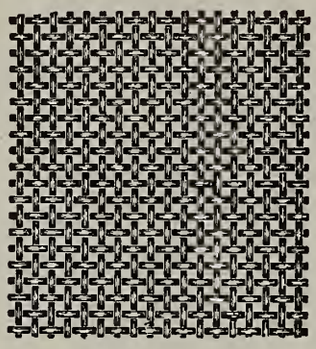
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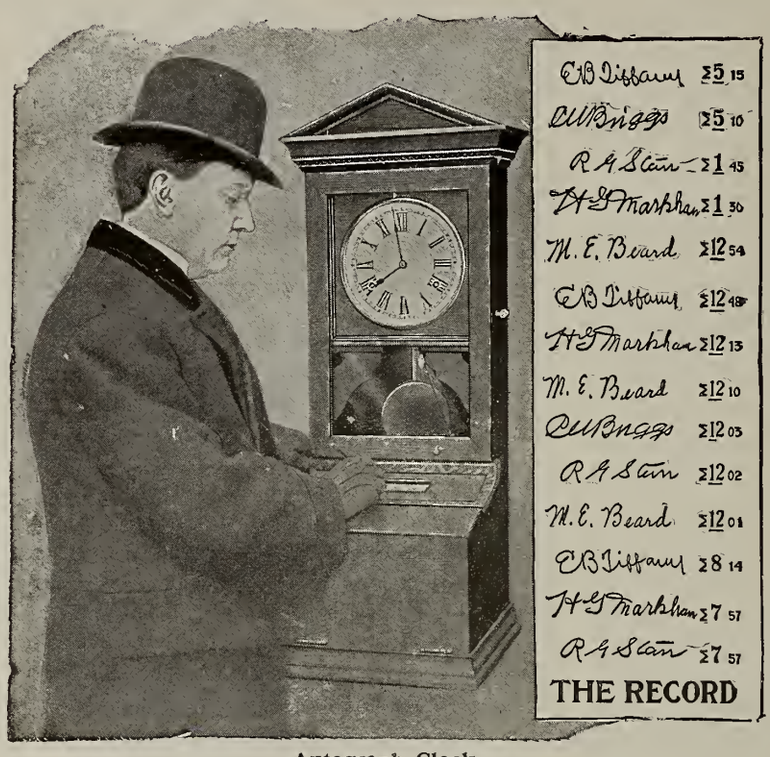
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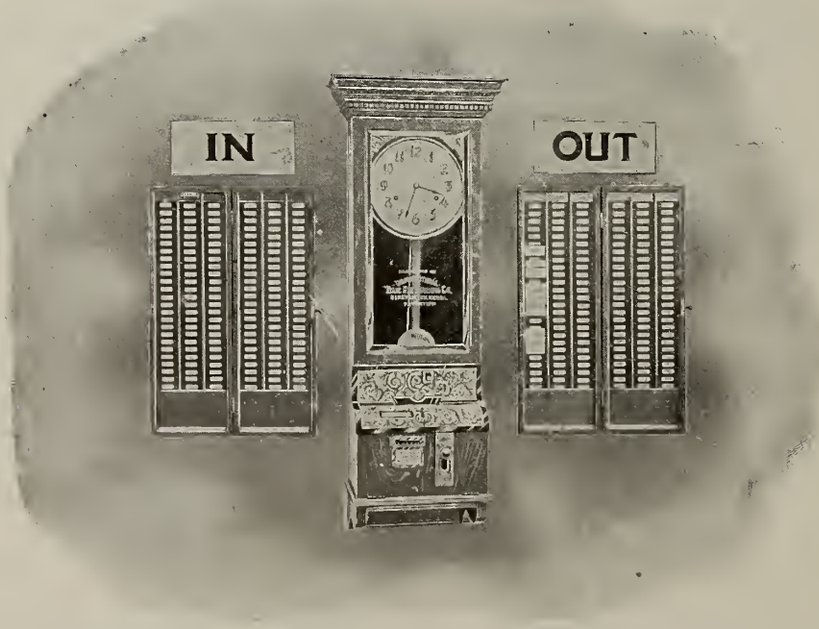
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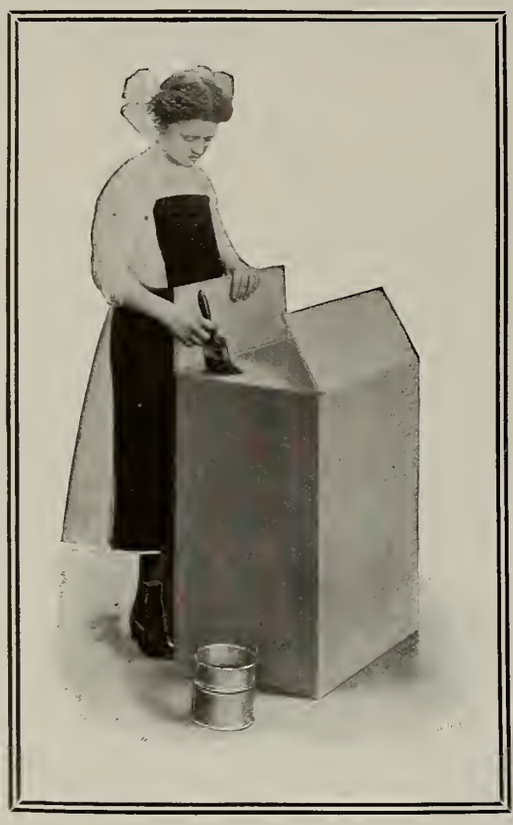
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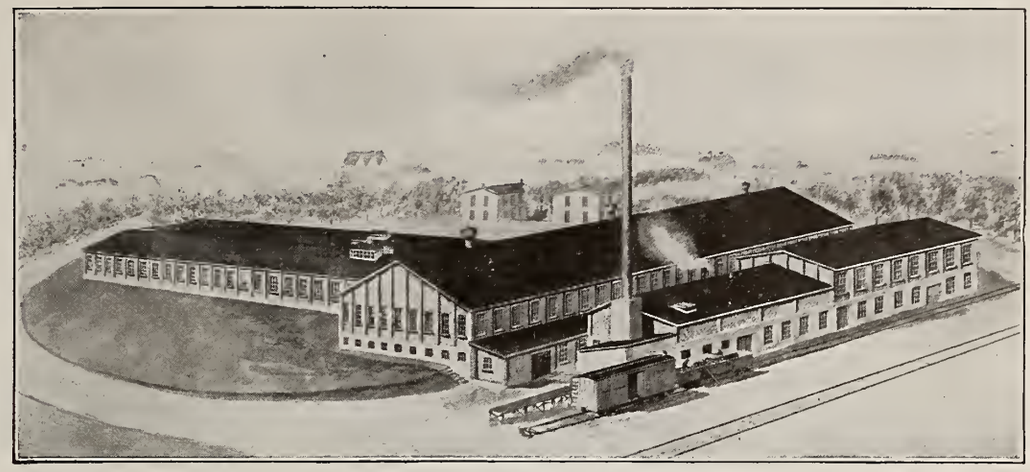
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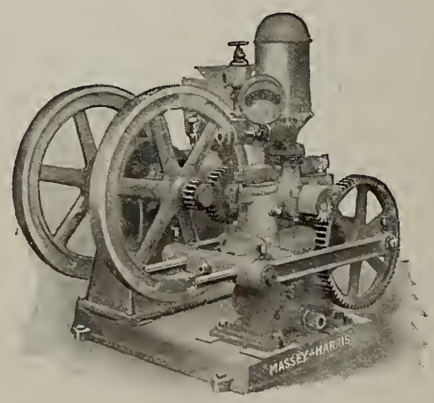
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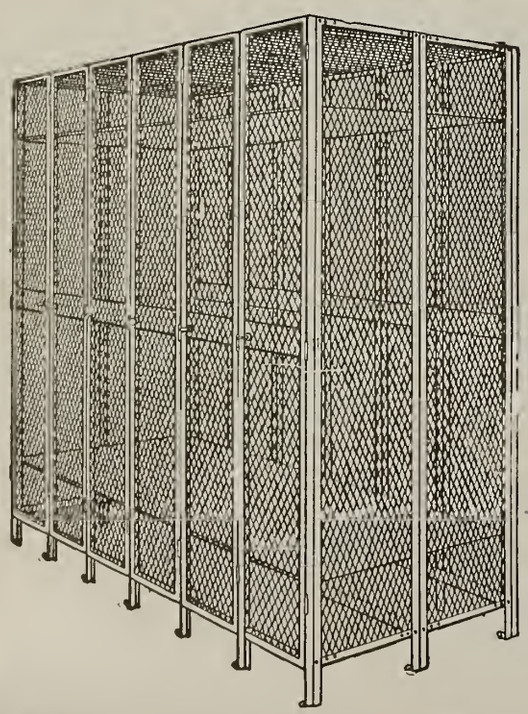
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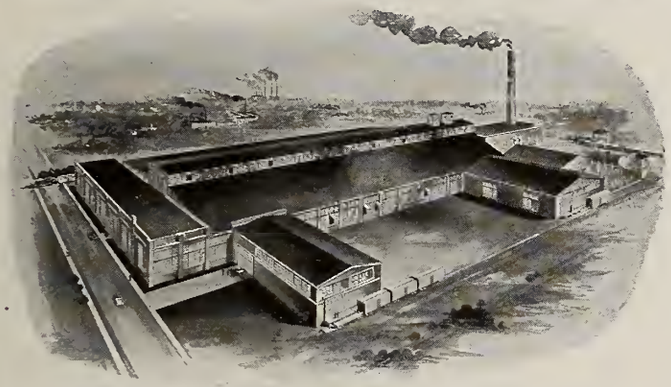
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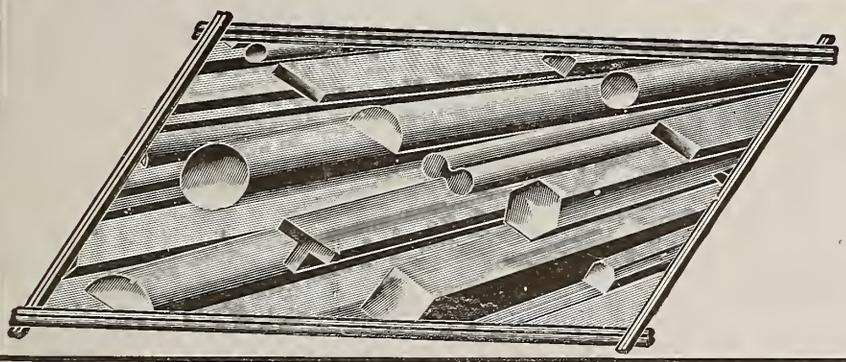
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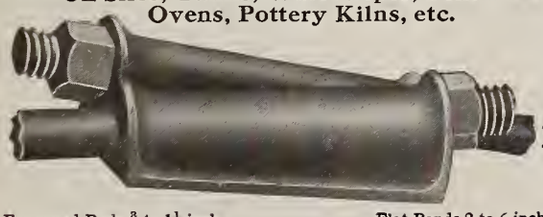
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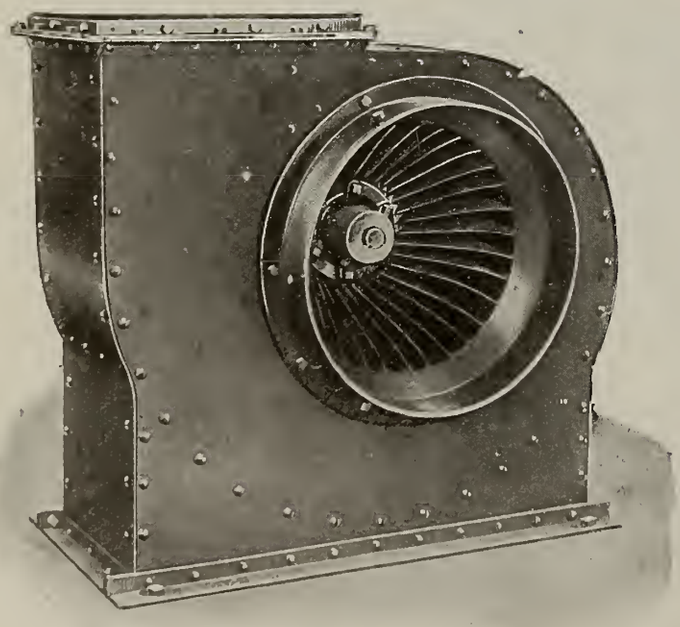
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Westinghouse Electrically Heated Industrial Appliances

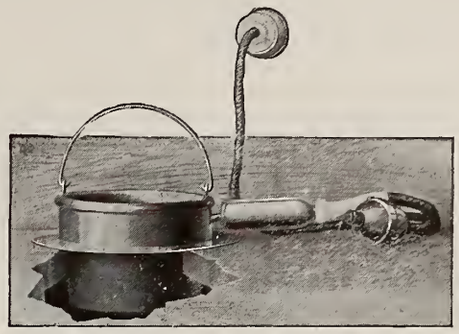
THE advantages of electric heat as compared with the open flame are obvious.

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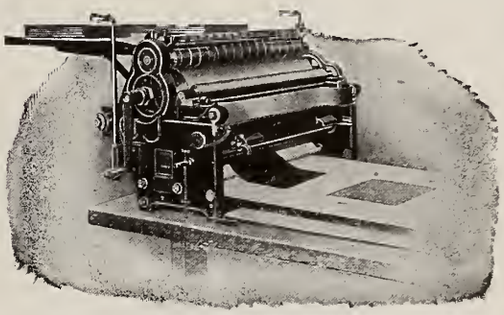
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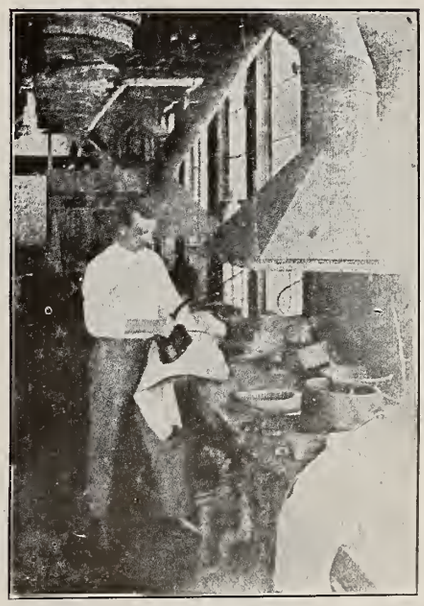
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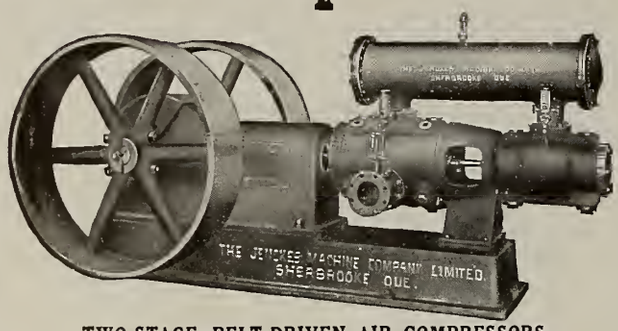
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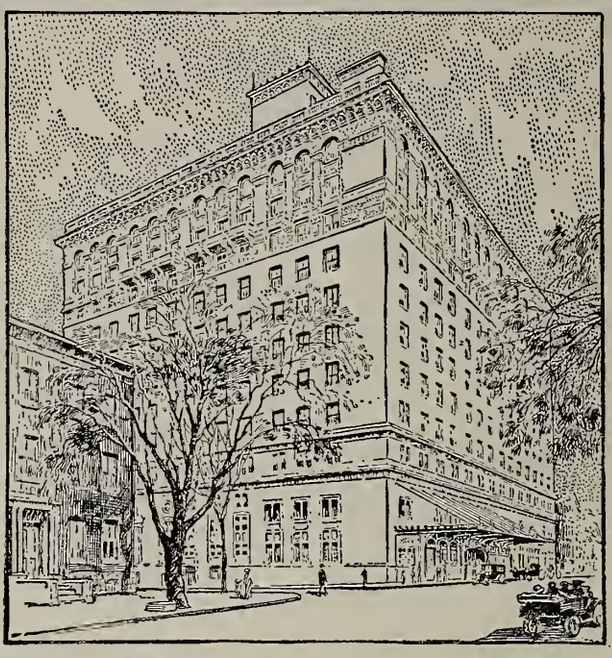
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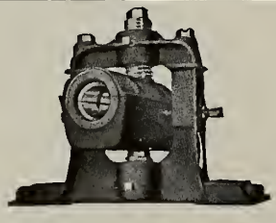
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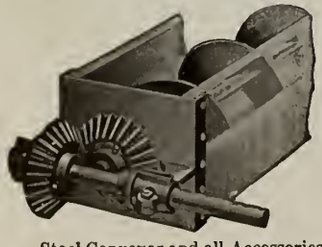


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ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XV. | TORONTO, DECEMBER, 1914 | No 5.

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

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Belgian Industry for Canada.

THE negotiations between Mr. H. A. Halus, a Belgian textile capitalist, whose factory at Ghent has been destroyed, and the city of Three Rivers, Quebec, regarding the possible erection of a plant in that city are of great interest to Canadians. Belgian industry is highly developed and the transfer of some of its processes to Canada would be of great advantage to us.

In Canada, we scarcely realize the importance of the place held in industrial history by Flanders, or that part of the "Low Countries," now principally occupied by the distressed kingdom of Belgium.

Curtiss, in his book "The Industrial Development of Nations," says: "The weaving of linen and woolen cloth made the Flemish weavers famous throughout Europe. The making of cutlery, armor, weapons, and the tanning of leather formed their chief industries. Flax, hemp and other products of the soil, carpets, damask and velvets, furnished employment for the people in all the principal towns and villages. The wool of Spain and England was shipped to Flanders to be dressed, dyed and woven into cloth."

In dealing with European industries of the fourteenth century, Gibbins says: "Bruges, Ghent, and Ypres (now in the thick of the fighting) possessed great commercial prosperity. Each of them had about forty thousand looms constantly at work, largely supplied with wool from England. The city of Ghent, in the year 1400, had eighty thousand men capable of bearing arms. The weavers alone furnished twenty thousand."

From the twelfth to the middle of the seventeenth century the Flemish manufacturers shared with the Dutch the chief markets of the world.

The fame of industrial Flanders aroused in Edward III, King of England, the desire to create similar industries, and we read that "in 1331, he invited John Kemp, a Flemish weaver, to set up cloth weaving in England, and he came with his servants and apprentices, both weavers, fullers and dyers. He and his men were to enjoy the King's protection and were encouraged to exercise their craft, and to instruct those who wished to learn."

Spanish oppression scattered the Flemish artisans, and many of them followed Kemp to England and contributed enormously towards the successful establishment of English industrial superiority.

There seems little to choose between the Krupp guns of the Kaiser and the swords of the Spaniards as agents of destruction, and it is probable that many Belgians, the worthy descendants of the Flemish, will seek new homes in Canada, where they may impart a measure of the industrial impetus which their similarly exiled ancestors gave to England many centuries ago.

The Russian Market.

THE potential purchasing power of the Russian people is so vast that it can scarcely be comprehensively estimated. Like Russia, it is immense, but difficult to define. The country has been regarded by Western Europeans and Americans as a vague region of almost unlimited dimensions, peopled by two classes—a governing autocracy of landowners, and a peasantry which was scarcely removed from servitude.

The truth is that the Russian people, during the past few years, have made such political and economical progress that the country is now undergoing a transformation which may develop into a beneficial revolution.

The new Russia has already entered a period of cou-

structive activity similar to those experienced by the United States and Canada. With what sort of industrial plant is she equipped to supply the needs of her development period?

In his book, "Economic History of Russia," Professor James Mavor, of the University of Toronto, quotes Professor Tugan-Baranovsky as authority for the statement that, in 1900, Russia had 38,141 factories and 2,373,419 industrial workers. The inadequacy of this manufacturing equipment is apparent in the following comparison with that of Canada in 1900:

Country	No. of Factories.	Employees.
Russia	38,141	2,373,419
Canada	14,650	339,173

Yet, in 1900, the population of Russia was approximately twenty-five times that of Canada. Consequently, if the same proportion of factories and employees to population had existed in Russia as in Canada, Russia would have had about 350,000 factories instead of about 38,000, and about 8,400,000 industrial employees instead of about 2,300,000.

During the last ten years we have organized for construction and consequently have a vast amount of machinery which must stand idle unless new fields open. It seems reasonable to suppose that, if we can sell agricultural implements to Russia, we can sell her other machinery, also materials for the construction period which is now beginning and which offers almost unlimited possibilities when the size and population of the country are considered.

Hitherto Russia has depended largely upon Germany and to some extent upon Austria for manufactured goods, but the war has stopped this trade and will greatly diminish it after peace is declared.

We may not be able to do much more than fill some war contracts for Russia just now, owing to transportation difficulties, but we should be able to enter the great Russian market when the war ends.

Foreign Buying of Banks.

"REFERRING to the enclosed editorial note in your November issue, please say either publicly in your journal, or privately to me, what Bank it was that placed a $10,000 advertising order, such as calendars, in the United States. We ought to know.

"The E. B. Eddy Company, Limited.
W. H. Rowley, President."

The above is a sample of the letters and enquiries received by INDUSTRIAL CANADA in reference to an editorial in our last number.

We regret that we cannot publish the name of the offending bank because it was given to us in confidence.

This bank's action is only an example of the purchasing policy of many of our Canadian banks. They exist, grow prosperous and declare large dividends by re-investing industrial workers' deposits, handling Canadian manufacturers' accounts and transacting Canadian commercial exchange. Consequently, it would seem only reasonable and fair that, when they purchase building material, equipment, office furniture, stationery and advertising matter, the money should go into the hands of those whose industry allows banks to thrive. We are glad to admit that the banks spend a great deal of money in Canada, but we regret that their past purchasing policy still sends large orders to foreign countries.

At the present time, manufacturers are struggling with what banks describe as "the usual credit." They see from time to time notices in the papers that the banks are declaring dividends at the rate of ten and twelve per cent, which emphasizes the fact that many manufacturing concerns are paying no dividends.

Surely, during the war at least, the banks should overlook trifling differences in cost and design, in the few cases where such differences are unfavorable, and agree among themselves to import no article from foreign countries which is made in Canada.

Trade Commissioners Not Salesmen.

THERE is some misapprehension about the duties of the trade commissioners who are maintained in British and foreign countries by the Canadian Government. These commissioners are not allowed to act in the capacity of agents for any firm or firms in attempts to secure orders, but rather as Government reporters of trade conditions. Their reports are released by the Government for the common benefit of all Canadians interested in export trade, consequently the commissioners cannot be criticized if they refuse to be active in the interests of particular companies.

The trade commissioners can serve Canadian manufacturers best by furnishing specific and detailed information, rather than general and vaguely optimistic statements. There is much valuable material, extracted and published from the commissioners' returns by the Trade and Commerce Department, and manufacturers should read closely the weekly reports issued by that Department, especially during the war.

Sir George Paish and Manufacturing.

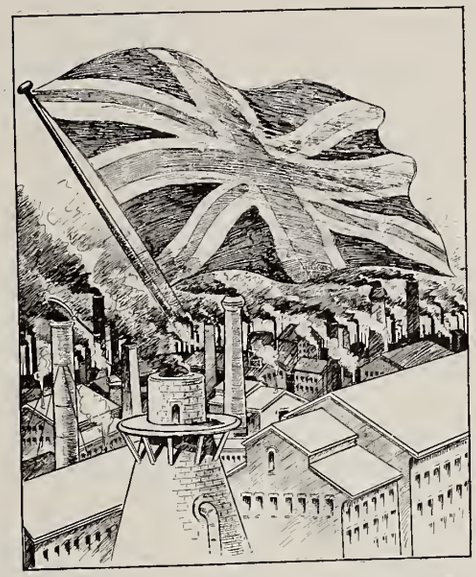
THAT "activity of trade is a normal condition during war time," was the opinion expressed by Sir George Paish, financial adviser to the British Government, in an interview published by the *Toronto Globe*.

"The circles of activity produced by the heavy expenditures of the warring nations may widen until next year we may find the ripples extending all over the surface which was almost stagnant two months ago," said Sir George. "Aetivity of trade is a normal condition during war time. It is plain that the industries which become

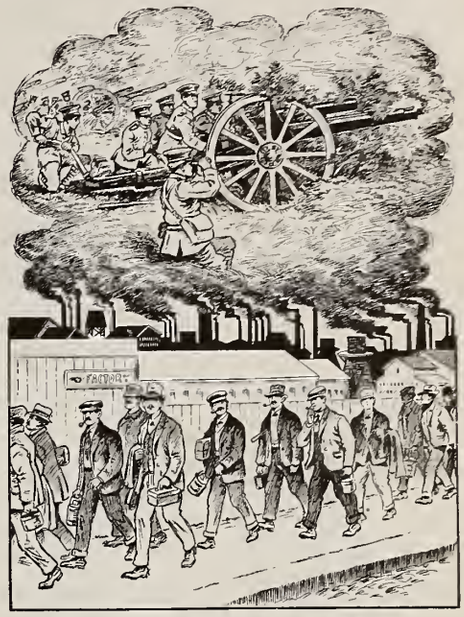
CANADIAN CARTOONISTS' VIEWS OF MADE-IN-CANADA CAMPAIGN.



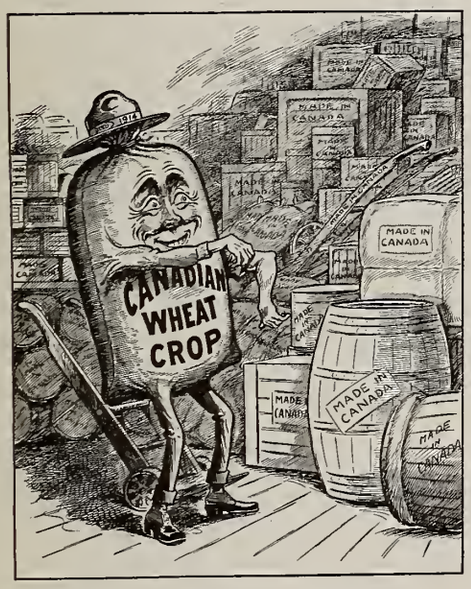
GOOD DOG.



KEEP THE WHISTLES BLOWING AND THE OLD FLAG FLYING.



THE FIRING LINE IN EUROPE IS DEPENDING ON THE WORK LINE IN CANADA.



I'LL SOON GET YOU MOVING!



CANADIAN MERCHANT TO FOREIGN DRUMMER.
—No! "Made in Canada" goods are what my customers want. They say they get their money in Canada and want to spend it there.



SOAK HIM!

very active because of the war must benefit many other industries. Money is expended with the utmost freedom by the belligerents during hostilities, and dull times are postponed. After the demand for war material ceases there will be a period of transition before the peace industries obtain a footing again and while people are economizing to pay for the waste."

His statement is substantiated by the liberal orders which have been placed with Canadian manufacturers.

Although the words, "dull times are postponed," have an ominous sound, we are too grateful for present relief to trouble unduly about the problems which will arise at the conclusion of the war. These will be met as other obstacles have been met in the past.

"Made-in-America."

THE business men of the United States are conducting a "Made-in-America" campaign. This calm assumption of all the results of the discovery of Christopher Columbus is only a continuance of an historical determination of the inhabitants of that strip of territory across the middle of North America to pose as the representatives of two continents. A true "Made-in-America" campaign should include the products of South America, West Indies, Central America, Mexico, Canada and Newfoundland. On this side of the border a "Made-in-Canada" propaganda is under way, but we have as good a right as the United States to label our national campaign "Made-in-America."

"BUSINESS AS USUAL"



—The Toronto World.

Massey-Harris Plants Resume.

THE Massey-Harris plants in Toronto and Brantford resumed operation on December 1st and Mr. Thomas Findley, general manager, states that all permanent employees will be given four or five days' work a week during the winter.

As the Company received a staggering blow when millions of dollars were tied up in implements in Europe, the decision to re-open its plants is a great tribute to its power of recuperation and also to its courage. There will be a limited sale for implements this winter, and the company's activity will fill its stock warehouses until the stimulus to farming creates a demand, which will probably be next spring.

As a matter of fact, since the war broke out the company has kept 1,500 men working in its plants in Toronto, Brantford and Woodstock, principally in the manufacture of military equipment.

The continuance of operations with a large proportion of the normal staff will do a great deal towards maintaining confidence and remedying unemployment.

Chemical Industry's Opportunity.

THE responsibilities resting upon those connected with the chemical industry is treated by Mr. Theo. H. Wardleworth in this issue. We commend his views to our readers.

Germany's mastery of chemistry placed her in the front rank of nations and the pace she has set makes it imperative that all who hope to compete with her shall prosecute with untiring energy the development of scientific research.

Canadians have the necessary intelligence and application to surmount the obstacles which confront the scientific student, but unfortunately these qualities have not been sufficiently concentrated upon chemistry, particularly as it applies to the processes of manufacture. We have been too willing to accept our chemistry ready made. The basis of specialized industry is a practical knowledge of the principles of chemistry, and Canada's commercial future depends to a great extent on the researches of her students, whether they are in colleges or factories.

Now is the time to quicken interest in the study and application of chemistry, and such societies as the Society of Chemical Industry are worthy of the strongest support and sympathy.

Canadian Motors for War.

"THE greatest wastage in the war has been in the motor vehicle line. Not only are the cars racked to pieces by hard service, but large numbers are destroyed by shell. British manufacturers have not the equipment to supply this wastage."—*Press despatch.*

Canadian motor car and motor truck factories have fine equipment and large staffs, and are ready to supplement the efforts of the British factories. In 1910, Canada had 8 automobile factories and 11 automobile repair and accessory plants, employing about 3,000 people. Hard times slowed all these factories, but war orders will give a great stimulus to our automobile and motor truck industries.

War Contracts for Canada.

NO orders for boots and shoes have been placed outside of the United Kingdom, according to the British War Office. From the same source comes the assurance that Canadian factories will be given boot and shoe contracts. As this war promises to be a struggle of resources, the British Government will, so far as possible, keep business within the Empire.

Prosperity for Grain Growers.

A YEAR of great prosperity for the Grain Growers' Grain Company has just been recorded, according to the following Canadian Press despatch from Winnipeg:

"A net profit of $151,080 on the year's operations of the Grain Growers' Grain Company, being approximately twenty per cent., was announced at the annual meeting by President Grearer. Ten per cent. dividend was declared and the balance placed in the reserve fund."

Twenty per cent. is a big dividend in these hard times, and we do not notice any manufacturers showing such profits.

Congratulations are due the grain growers for their successful management of a business which is closely connected with "the great industry."

Worshipping a Golden Calf.

WE Canadians, during the last fiscal year, took $633,692,449 of our gold and made it into an idol. We labelled this idol "Imports entered for consumption." Its body was made from $378,118,810 worth of gold, or in other words, the value of "articles wholly or mainly manufactured" imported into Canada.

Having set up our idol, we bowed down to it.

All classes, old and young, have come under its influence. The idol has brought us goods from far countries at our solicitation, and at its own initiative has blinded our eyes to the merits of our own products. It has afflicted us with the extraordinary delusion that foreign goods are more desirable than home goods. It has created and fostered an exaggerated egotism which says to itself: "These foreign workers toil to produce articles for me. Trains run and ships sail to bring these things to me. They come from afar and are made by strangers. There is a flavor of the unknown about them. Much labor must be expended to get them here. Therefore they are superior and desirable."

And such is the power of the idol that, though our factories slow down and the country is burdened with unemployed we continue to build up the industries of other countries at the expense of our own. The false idol must be served.

If, by making one idol, we could have escaped, our folly would not be so apparent. But we have a new one annually; the old one vanishes with the old year.

In 1868 we started with a comparatively small one which required only $71,985,306. At the beginning of the present century our idol was still within reasonable dimensions, for, in 1900, we imported but $180,804,316 worth of goods. Ten years later our idol required $375,833,016 for its composition. Now it takes $633,692,449. It is truly a fatted calf.



Deposing an Ancient Idol.

(Specially drawn for INDUSTRIAL CANADA.)

And our gold goes into these successive brazen images, never to return.

It is time that we broke this idol, or rather that we should melt it and keep our gold in our own country. In this crisis we should have the clear vision to recognize that goods produced in Canada are worthy of our patronage and that the more we buy the better their quality will become.

Let us worship Jack Canuck's beaver for a change.

Illinois Manufacturers Looking Toward Canada.

"THE great Canadian market, for which the American manufacturer and advertiser would have had to fight, and fight hard, two months ago, now almost comes tumbling into his lap."

The above statement appears in *Standard Advertising*, Chicago, written by a special representative who was sent on a trip through Canada for the purpose of reporting upon trade conditions. The article continues:—

"Canada, with a population of between eight and nine millions of people, three-fourths of whom are British, imports very nearly seven hundred millions of dollars' worth of goods per annum. Of this only about $450,000,000 comes from the United States, or about 58 per cent.

"Right here is a great field for the American manufacturer, a field worth roundly $250,000,000 a year, the amount of the imports which have been coming from Europe and which are now almost completely stopped. But this is not all. Canada's response to the appeal of her mother country has been so whole-hearted that many workingmen will go to the front, leaving Canadian factories short handed. In that case the United States will have to supply a large portion of the goods now provided by domestic manufacture until Canadian conditions are normal.

"There is another phase of the matter that American manufacturers might do well to consider now. Canada's exports to the United States are, roughly, about $151,000,000 a year, two-thirds of which represent manufactured articles. If Canadian factories shut down or curtail their productions to any extent it will mean that American manufacturers will benefit to the extent of about $100,000,000 a year till the Canadian factories are running full time again.

"It is difficult for the average mind to grasp in figures the immense opening there is in Canada for American trade. It may be better understood when I say that Canada's total imports are nearly as much as Italy's, and three times as much as Spain's, and one-third that of the United States."

The writer believes that the war will enable the United States manufacturer to entrench himself firmly in the affections of Canadian buyers. "The American manufacturer," he says, "once established in Canada will give all comers, even after the war is over, a stiff fight to take it away from him."

We are forced to admit the accuracy of much of the above. The United States manufacturers are enterprising. Many lines of their goods sold in Canada are reasonable in price and of good quality. They will be powerful competitors of Canadian manufacturers during the next year. They have also every right to seek business where it may be found, and the undoubted privilege of taking orders in Canada if they can get them. If they sell their manufactured goods here in great quantities they are only doing what Canadian manufacturers would do in the United States if they were able.

But there is one factor with which United States manufacturers who contemplate excursions into Canada are not reckoning, and that factor is the Canadian who is determining to buy only the manufactured products of his own country during the war. This buyer has decided that the policy which built up the industries of the United States will also build up the industries of Canada. He has learned his lesson from his United States friends, and intends to buy at home.

Grain Growers and Manufacturers.

GRAIN growers and manufacturers going hand in hand to Ottawa, making common requests to the Government, is an unusual sight in Canada.

On November 24th, following the preliminary meeting in Winnipeg, representatives of the farmers and manufacturers of Canada interviewed the Prime Minister in Ottawa, asking for Government aid in an attempt to solve questions affecting transportation, production, fiscal and legislative problems.

That the friendly co-operation of farmers and manufacturers should contain an element of incongruity is only an evidence of the former unnatural hostility which existed between these two classes. The recent alliance shows that manufacturers and farmers can and should work together. One class is the complement of the other. Their interests are in common and have been divided largely through misunderstanding, or through the efforts of agitators and politicians who had their own selfish interests to serve.

The war has eliminated petty grievances just as a domestic calamity sinks family quarrels. In the future the word should be "Shoulder to shoulder for the welfare of

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The Canadian Crop of 1915.

FORTY-eight per cent. more land has been prepared for crop next spring than in any previous year, according to Hon. Robert Rogers, Minister of Public Works. The information on which the statement was based appears in a special report on farming conditions by Mr. Bruce Walker, of the Interior Department. Two million bushels of seed wheat, of barley and of oats, or six million bushels in all, have been purchased to provide farmers with sufficient seed grain next spring.

This is part of Canada's splendid response to the demand for agricultural produce. The 1915 crop, with favorable weather conditions, should surpass our previous crops by between fifty and one hundred per cent., counting the inevitable increase of acreage which will be plowed next spring. The 1915 crop will probably be sold at higher prices than have been obtained in the history of Canada, and the receipts will swell the credit side of our national ledger.

THE SOCIETY OF CHEMICAL INDUSTRY IN CANADA

By THEO. H. WARDLEWORTH

THE opening session of the Society of Chemical Industry of Canada for the season of 1914-15 finds the interests it represents in a position not likely to occur again for many a long decade. War has broken out between the leading European nations and we find ourselves in conflict with the country which has achieved the principal successes in the domain of chemistry. Supplies of very necessary materials can no longer be secured from their usual sources and we are compelled to not only look elsewhere for the goods, but, to take steps to see that such a contingency does not arise again, by seeing to what extent we can provide such products in our own country, which is so rich in natural resources.

Opportunity for Chemical Research.

It would appear, therefore, that our Society is fulfilling its functions in a most pronounced way, when it takes upon itself the task of ascertaining to what extent the chemical industries of the country can best be helped, and as far as possible extended, to meet the needs of the present, and the greater demands of the future, as wars have been known to last for many years before they were ended by lasting peace.

We may have to ask our Government to assist us in this work, and we believe we shall have a sympathetic hearing when we present our claims, for, as a recent writer says:—

"The welfare of industry is directly contingent on the progress of science however purposeless and theoretical the line of advance might at first sight appear."

The German Attitude.

This fact has been very keenly appreciated by Germany, and while there are limitations to the German mind, it has the faculty of ready perception, willingness to adapt, capacity for method and organization in the development of industries initiated by others. Science has been encouraged to a wonderful extent in the German Empire with results that have surprised the world and contributed to the wealth of the German people. It would seem at the present time that it is almost impossible to compete against the huge combinations of scientifically-managed manufactories at present existing in Germany, notwithstanding the fact that in almost every case they were originated in either France, England or the United States.

While the development of scientific research in Germany is so largely a fact of the past twenty years, still it has not satisfied the Teuton desire for progress and further aid has been sought. The German Government has for many years endowed the universities and technical schools with sums, vastly greater than those provided for similar purposes in England and other countries; still, it was decided some years ago to add to their already great resources by the foundation of a society for the promotion of science, and the following particulars of this society may be of interest:—

Description of German Society.

"The society in question is the Kaiser-Wilhelm Society, which, taking the name of its protector and patron, defines in its statute its primary object: 'To promote the sciences, especially by the foundation and support of scientific institutes of research.' The income of the society, subscribed by private individuals, or by firms, will be devoted to the establishment of institutes of research in which distinguished investigators in the various branches of science will be afforded facilities and means for the prosecution of their chosen problems.

"They may also, if they so desire, call in the collaboration of younger men, students who are intending to graduate in one of the State universities. By this means much of the drudgery involved in all research may be transferred from the shoulders of the master-thinker to those of his disciples, who thereby acquire not only knowledge of the methods of experimentation, but, what is even more important, the spirit underlying all scientific investigation."



MR. THEO. H. WARDLEWORTH

Director, National Drug and Chemical Company of Canada, Limited, and Vice-Chairman of the Montreal Branch C. M. A.

"*First*,—and above all, is the discipline that the German people have undergone by their military training; more are thus prepared for practical life in a measure which cannot be otherwise attained. It has its disadvantages; on the whole, the people are not so self-reliant, but they become more trustworthy machines.

"*Second*,—There is a deeper understanding of scientific achievements and their bearing on industry. This manifests itself in many ways; the German Government is not above asking for, and acting on, scientific advice. The social position of the savants, scientific and literary, is therefore assured, and the incomes of the higher posts compare favorably with those earned by professional men and manufacturers. This higher social standing secures attention to those who tender advice.

"*Third*,—There is a constant exchange between academic and industrial posts; many men leave chairs to become managers of factories; many men enter the teaching and investigation profession from factories. Chemical and physical factories, too, there form a training school for the younger scientific experts; where many are employed, the more advanced communicate their knowledge and the results of their experience to the junior members of the scientific staff; in fact, they have apprenticeship at its best. Here, in prosperous times, the manufacturer thinks that he has no need of scientific assistance; in times of bad trade he believes that he cannot afford it. And, lastly, the process of training the people has gone on for nearly a hundred years in Germany. Rewards have been given, not to successful examinees, and not in the form of scholarships, but have been earned in the battle of life, for which ample preparation had been given."

Canada's Natural Resources.

As a country, we are blessed with manifold natural advantages—our mines give us arsenic, antimony, cobalt, nickel, copper, platinum, osmiridium, gold, phosphates, magnesite, silver, chrome, tungsten, molybdenum, baryta, mica, graphite, asbestos, lime, salt, shale and coal, and, taking these as a starting point, why should not many of the metals mentioned be refined in Canada—why should all our crude nickel go abroad to be purified? Why should we not make our own sulphate of copper,—hundreds of tons of which are imported every year? Phosphatic rock, with all its possibilities, is to be found in large quantities within a hundred miles of Montreal. Tons of magnesia in the form of carbonate and calcined are imported every year; yet we have large supplies of the crude material within easy reach of Montreal. In addition to the manufacture of carbonate of magnesia and calcined magnesia, I am informed that we have wonderful deposits of magnesite, which would be very suitable as a furnace lining, except for the fact that it lacks a small trace of iron. While this appears to be a very trifling defect, it stands in the way of the commercial development of a large industry. It is said that it has been impossible to overcome same by any known process of blending the iron with the magnesite. Here is a problem for our young chemists, which, if solved, would contribute materially to their own advantage and would add to the general prosperity of the country. There is an ever-increasing demand for peroxide of barium, and while we have large supplies of baryta in Nova Scotia we do not produce an ounce of the peroxide, bringing it all from England and Germany. It may be claimed that baryta is not as suitable for making the peroxide as witherite, but that is the problem for our chemists. Graphite is to be found here and as the price of pencils is likely to be advanced, would it not be worth while to pay attention to the compounding of graphite for making pencils, and if we are successful we may be sure our wood-workers would do the rest. Why should our phosphorus go abroad and come back to us in the form of phosphoric acid, the various phosphates, phosphites, and hypophosphites, at enormously enhanced prices? In Nova Scotia, it is said there are enormous deposits of shale,—now, the subject of financial development. Instead of shipping the shale, why should we not make the finished products? It is true that we are doing something practical with our salt deposits, but it would seem to me that our enormous imports of bleach ought to suggest a great extension to the development of this work.

Further Opportunities for Manufacture.

Turning to wood products—we now make wood alcohol, acetone, acetic acid, acetates of lime and soda, and formaldehyde,—but, one is tempted to ask why we cannot make the glacial acetic acid; we can produce the 80%, but import the 99%.

In some directions we are doing well. The calcium carbide industry is well established and we are beginning to supply the world, thanks to our supplies of raw materials, our unapproachable water powers and the initiative and energy of the manufacturers. The same company are about to produce ferro-silicon, and it will be on the market at an early date. We may expect cyanimide and probably other products from atmospheric nitrogen in the near future.

What is Being Done.

We also produce, and produce well, all the commercial acids,—sulphuric, muriatic and nitric, but it would appear that we do not make as much use of this fact as we might in other branches of chemical industry by the production of resulting compounds.

We now refine glycerine in two centres—Montreal and Toronto, and excellent results are given by both factories.

Ethyl alcohol is also produced in this country, a fact appreciated by many of our members, but it seems to me that it is the duty of this Society to ask the Government for the privilege of free alcohol for technical purposes. It has been said that the refusal of the British Government to give permission for the use of free alcohol to the infant industries was the main cause of its decline and transfer to Germany. In making our demands on the Government we must be very explicit in our claims that it will be of benefit to the chemical trade to enjoy such a concession. Under the head of alcohol, would it not be within reason to ask the Government to make arrangements whereby manufacturers in this country could use the fusel oil, most of which is now sent to the States and comes back to us as banana oil, so largely used by the bronze paint people, and also as amyl acetate.

Scarcity of Potash.

We are as a country very short of potash as a product. In the past we used to produce a large quantity of carbonate of potash, but this seems to have fallen off considerably of late years, due probably to the fact that so much of the country has been cleared that there is not now the same opportunity of collecting the ashes as in the old days. At the same time we may say that recently an investigator submitted a process for getting potash from sawdust, but as his process only yields about 3%, it is feared that the making of potash in this way would not be a commercially profitable process. The matter of this utilization of sawdust as a basis for the manufacture of either potash or oxalic acid might be seriously considered, as of course we have abundant supplies of raw material, which at the present time constitutes nothing but an annoying problem to the producers. There is another source of potash available to us at the present time and that is feldspar. We believe there is large deposits of feldspar in the neighborhood of Kingston, and contains about 18% of potash (?), and the problem is how to get this out commercially and on a satisfactory basis. How far this can be done is a question which must be left to our chemists to decide.

There is also the prospect of potash salts being found in British Columbia, and it is within the range of possibility that we may some day find deposits of these—and we hope upon some scale equal to those in Germany.

Carbolic acid is being produced in different parts of the Dominion, but so far as we can learn there is no evidence of the production of the finer grades, or of efforts to produce absolute phenol, and it would appear that this is a field

which might be cultivated to advantage for the simple reason that we have very large supplies of raw material, and the demand for carbolic acid in the Dominion is very considerable indeed. It is to be admitted that the making of the finer grades of carbolic acid is a delicate operation, but then this is always within the sphere of a chemist's work, and we hope that in the near future we shall have the crystallized carbolic acid of good quality offered to us of Canadian manufacture.

In reference to the paper industry, this seems to be well covered by the chemists, but there is one line which I think our paper friends could devote some attention to, namely, that of parchment paper, in all its forms. We import enormous quantities of this article from Germany, and other parts of Europe. It seems to me that as we have the primary materials here in such abundance, it should be possible for us to produce on the spot parchment paper equal to any in the world.

The Ammonia and Allied Industries.

Touching upon the ammonia industry, we may say that this is produced in large quantities and of excellent quality in the Dominion, but, so far, we do not seem to have succeeded in making the carbonate to compete with either the American or the English, and this is a point which I think might be taken up with advantage by our Canadian chemists, as we import large quantities of this particular article, not only for chemical purposes, but also for domestic use.

Allied to the production of ammonia is the napthaline industry, and so far we have been able to produce a grade of flake napthaline which compares favorably with the English and American products, but it is open to some objections which affect its sale to the general public in any large measure. But we understand that the manufacturers are, however, turning their attention to the improvement of their product, and hope at an early date to produce not only the flake but the ball napthaline as well.

Conclusions.

I have outlined to the best of my ability some of the directions in which the energies of our chemists may be directed for the development of the chemical industry of Canada, and my hope is that the discussion which may follow my efforts will result in considerably developing the subject, as I feel sure that we are capable in Canada of very largely extending the area of our usefulness in the domain of chemistry.

We must look to the Government and our richer citizens for assistance to foster research, as I am convinced that a great deal of the value of the future work will depend largely upon research carried on to-day by our master-thinkers in Canada. I do not think that we should depend too much upon the illusive prospcts held out by the abrogation of patents or anything of that kind, but rather that we should look to our younger chemists to throw themselves into the fields of earnest work for the improvement of old processes and development of new ones.

E. B. EDDY COMPANY AT FULL STEAM.

The match-making, paper-making and other industries of the E. B. Eddy Company, Hull, have been seriously affected by the scarcity of and the increased cost of the necessary raw materials, but in the following interview, given to INDUSTRIAL CANADA by Mr. W. H. Rowley, President of the Company, there is nothing but determination to overcome obstacles, and faith in the future:

"We are having difficulty in obtaining chlorate of potash, glue, gums, dyes, zinc oxydes and colors," said Mr. Rowley, "and we are having to pay more for these things; but the main point is that *we are getting them*, and I do not expect there will be any 'close-down' at Eddy's Works this winter or any curtailment of labor here.

"We intend to do our best to keep every wheel spinning and every man and woman employed that we possibly can this winter. . . . . Business is good; it could be better," continued he. . . . . "Our expenses are high just now, but we want to give all the work we can to our men and women everywhere and also to look after the dependents of those of our men who have gone to the front, by allowing half-pay to some score or more already gone and to others likely to follow with the other contingents. This is quite an item.

"ARE WE DOWNHEARTED? NOT AT ALL! I believe that this war will give Canada's trade an impetus, and we are going to continue cheerful and optimistic. . . . . We will not increase the price of our wares any more than is absolutely necessary," concluded Mr. Rowley.

JAPAN'S IMPORTATIONS OF METAL MANUFACTURES AND MACHINERY IN 1913

Our Ally, Japan, is a heavy Buyer of Metal Manufactures. How Much can Canadians Supply?

Articles Imported by Japan from—	United Kingdom	Germany	United States	Total All Countries
Automobiles and parts of	$128,035	$93,316	$242,688	$552,802
Bicycles and tricycles	350,265	7,941	56,042	415,855
Cranes	211,946	235,477	86,237	537,495
Electrical machinery	515,665	727,264	849,781	2,136,490
Gas, petroleum and hot-air engines	287,490	178,730	39,754	605,694
Locomotives and tenders	21,472	334,599	829,859	1,188,582
Material for construction	399,655	414,651	570,627	1,430,007
Mechanics' tools and agricultural implements	89,251	33,001	114,440	247,734
Metal and wood working machinery	943,674	273,420	389,897	1,632,955
Iron bars, rods and plates	8,493,852	4,396,363	1,308,713	16,343,190
Ingots, pigs, blooms and slabs	2,383,260	395,751	.....	6,168,131
Pumps	304,571	81,856	135,263	538,435
Sewing machines, and parts of	26,534	15,968	335,380	437,122
Steam boilers and parts of	328,789	74,757	38,437	486,217
Steam engines	108,853	110,956	13,760	283,527
Textile machinery	2,915,629	317,292	18,994	3,258,561

COMMERCIAL POSSIBILITIES IN RUSSIA

(British Board of Trade Journal).

THE Board of Trade has received, from a reliable source, the following information regarding commercial conditions in Russia and trade openings there:—

Of all the countries concerned in this war Russia is the one which is the most self-contained and self-supporting. As a nation she can feed herself, and has in times of peace been a large exporter of foodstuffs to other countries. At present, owing to the interruption of communications with abroad and the consequent restriction of exports, Russia is in an exceptionally good position as regards food. Further, as only an extremely small portion of the Russian Empire at large has been in the war zone, the country has suffered practically no damage, and it is hardly likely in the future to receive any.

As regards manufactures, the mills and factories are work ing in quite a normal way and, so long as they can get the necessary raw material, there is every prospect of their continuing to do so. There has been practically no dismissal of workpeople. Business concerns which do not depend upon imports from abroad are, as yet, feeling very little of the consequences of the present conflict.

Anti-German Feeling.

The intensity of feeling against the Germans is very great. From the highest to the lowest this feeling is being fostered and will, no doubt, continue for a long time after the war is over, and firms which have hitherto been getting supplies from Germany must consider what steps to take for the future. For many years German manufacturers have made a most systematic bid for the Russian market and their success has been, in a very great measure, the result of their own systematic organization and the way in which they have tried to meet the whims and fancies of the people whose orders they sought. In addition, the most progressive firms sent out their catalogues and circulars printed in the Russian language, giving Russian prices, weight and measures, which always gave their offers a better chance of being considered by the intending Russian purchaser than those submitted by firms from the United Kingdom, who could only supply their circulars and catalogues in a language which was usually unintelligible to the purchaser.

British firms desirous of acquiring some of the Russian business which has hitherto gone to Germany must start now to complete their organization for such an attack, and they should remember that the greatest measure of success is most likely to fall to those first in the field.

Specialized Goods Introduced.

The introduction of German machinery into Russia was aided by many circumstances. In the case of textile machinery, especially for use in bleaching, dyeing, finishing, printing, etc., many German colorists and other technical men gained situations in Russia at the expense of British subjects, and they naturally recommended those makes of machines on which they had been originally trained in their own country. It was not always a question of the introduction of a superior class of machine, but merely the fact that they were trying to do a good turn to their own country, or satisfying their own whims. It must not be overlooked, however, that whilst such people worked for the introduction of the German article, the German manufacturers themselves followed up the introduction with vigor.

With regard to the engineering world, and especially the electrical and the more scientific mechanical sphere, the Germans secured the Russian market largely because so many Russians can speak German and can consequently discourse with the makers in their own tongue. They were also aided by the close proximity of Germany to Russia, and by the fact that the bulk of the Russian technical literature had its foundation in the German text-books. The major part of the technical text-books, reference tables, etc., published in Russia are translated from the German, and consequently the litre, kilogram, and the metre are well known to the Russians, whereas the more complicated English moneys, weights and measures are not so intimately known. If there is to be a revival of business between the United Kingdom and Russia, it will be necessary for British makers to adopt some of the methods of those nations who have succeeded so well. The honest methods generally in vogue amongst United Kingdom makers would succeed if they were worked in the right way. One thing is certain, British firms are not going to snatch the Russian trade from the Continental suppliers by the old-fashioned methods of submitting their samples and letting the matter rest. They will need to ascertain what brand or quality of goods has been satisfying the users of German goods and then see what they can offer as near as possible to them, whilst, at the same time, of course, keeping their regular standard articles before intending purchasers.

Gave Stock in Consignments.

One feature of the methods which German manufacturers adopted to introduce their productions into Russia was the readiness with which they supplied consignment stocks. Quite small business people of exceedingly limited means, owing to the support given to them by the German makers, were able to develop good business connections, and any visitor can see scores of shops full of all kinds of goods from Germany, and when one seeks to find how such stocks are held the one answer is "consignment."

Can We Supply These?

The following may be mentioned amongst the articles which have been introduced extensively into Russia by the Germans:—

All kinds of textile machinery, especially that appertaining to bleaching, dyeing, finishing and printing; small engines and locomobiles (the latter have been sold in large quantities, although 20 years ago the trade belonged almost exclusively to the United Kingdom); boilers and steam piping; automatic looms and preparation machinery for weaving mills; apparatus for heating, lighting and ventilating large buildings; elevators and lifts; mining machinery; steam turbines and electrical apparatus of all kinds; steam pumps, especially those of moderate sizes, used for boiler feeding and the ordinary run of pump supply used in mills and factories; all classes of steam fittings.

Russian firms have commenced to manufacture for themselves, but the articles required for high-pressure steam, necessitating bodies of cast steel, are obtained in considerable quantities from Germany.

Germany also sends the following, amongst other, material to Russia: Paper makers' felts and wires; wire ropes, also hemp and manila ropes; woven belting; leather belting of an inferior quality, but sufficiently good for the purposes for which it was used; electric lamps; all kinds of steel goods, especially tool steel.

AGRICULTURISTS AND MANUFACTURERS HOLD CONFERENCE IN WINNIPEG

Decisions Reached at the Meeting

THE following statement has been authorized to be handed to the press as summarizing the results of the conference held last week in Winnipeg between representatives of the Graingrowers' Associations of Manitoba and Saskatchewan, the United Farmers of Alberta and the Canadian Manufacturers Association.

Among those representing the agriculturists were: Messrs. R. C. Henders and R. Mackenzie, of the Manitoba Graingrowers; J. A. Maharg and J. B. Musselman, of the Saskatchewan Graingrowers; — Tregillus and P. P. Woodbridge, of the United Farmers of Alberta; — Crerar, President of the Graingrowers' Grain Company; Chas. A. Dunning, General Manager of the Saskatchewan Co-operative Elevator Company; G. F. Chipman, editor of *The Graingrowers' Guide*, and others. The Canadian Manufacturers Association were represented by their President, Mr. E. G. Henderson, of Windsor, Ont.; their Vice-President, Mr. J. H. Sherrard of Montreal; Mr. Thos. Cantley of New Glasgow, N.S.; Mayor Deacon of Winnipeg, H. B. Gordon of Winnipeg and G. M. Murray, Secretary, Toronto. Dr. C. C. James, of the Federal Department of Agriculture, attended on behalf of the Dominion Government, and Professor Cumming, Secretary for Agriculture for the Province of Nova Scotia, was also present.

Statement Issued at Winnipeg.

This meeting, comprised of representatives from Canada's two greatest industries—agriculture and manufacturing—deems it expedient to issue the following statement as a record of the conclusions to which it has been led as the result of its deliberations.

The thought uppermost in the minds of us all, the issue transcending all else in importance, is the war. Upon that we have but one opinion to express, one determination to record—the Empire must win, the Empire shall win.

We recognize, of course, that success may not be easy of attainment. We recognize that it will call for conscientious effort, for real socrifices, both national and individual, and on behalf of our respective industries we pledge ourselves that those efforts shall be put forth, that those sacrifices shall be suffered, ere we will submit to the triumph of tyranny and injustice.

A Struggle of Resources.

As the struggle proceeds it is becoming more and more apparent that it will be a struggle of resources. We must not close our eyes to the possibility that even the last shilling may turn the tide as between defeat and victory. Such being the case, it is no more than Canada's duty, and the duty of all her citizens, to utilize to the utmost the bountiful resources with which we have been blessed. We rejoice in the fact that we have contributed and will continue to contribute, men, but we rejoice still more in the fact that it lies within our power to feed and in other ways to minister to the wants of those who are fighting the Empire's battles. The responsibility of increasing our production rests heavily upon us, and to that problem our best energies must necessarily be directed.

But in turning with grateful hearts to the performance of this duty we have no desire to make a virtue of necessity. Apart altogether from the exigencies of the war, a substantial increase of our production, on a sound economic basis, is not only a desirable but an essential step at the present stage of our development. In the majority of our undertakings, whether national, provincial, municipal or private, our policy for years past has been to build for the future. In this process of building we have been inspired by an unbounded confidence in the future of our country. Nothing that has happened, nothing that will happen, can ever disturb that confidence or show it to have been unjustified. We recognize the fact, however, that we have financed our undertakings very largely on borrowed capital, upon which interest charges have been rapidly accumulating. We also recognize the fact that for years the balance of trade has been steadily against us. The obligations thus incurred have heretofore been partially met by increased borrowings, but the time has now arrived when we must endeavor to meet them, not by incurring new and larger obligations, not by striving for that factitious wealth which finds its basis in speculation, but by devoting our energies to the creation of that real wealth which comes from profitable production.

The problem before us naturally lends itself to consideration under two heads, according as we seek to turn our resources and our capabilities to immediate account, or according as we endeavor to provide ourselves with a broad, comprehensive plan for the full and symmetrical development of all our resources, looking to the future to bring us our best rewards.

The Immediate Results.

Immediate results are, of course, a desideratum, providing they are profitable results—not otherwise. If it were merely a question of increasing our production without regard to economic gain or economic loss, our problem might resolve itself into the bringing of a larger area of land under cultivation. That we could do without delay. But would it necessarily profit us?

The cultivation of any land is of benefit to a nation only as those who perform that labor are able to thrive, are able to achieve not simply an existence, but a measure of independence. They thrive when, under normal conditions, they are able to sell their crop at a price substantially in advance of their cost of producing it. They exist so long as there is any margin between the price they realize and their cost of production. They cease to be an asset and become a liability to the country when, under normal conditions, the price their crop brings is less than what it has cost them to produce it.

Cultivation of Larger Areas.

The bringing of larger areas under cultivation would be a step in the direction of increasing our wealth, only provided those who would engage in this work were able to farm the land at a profit to themselves. Moreover, that profit would need to rest on a stable basis, so that its existence, its continuity, would be assured for the normal times that will be resumed when the war is over. Any "back-to-the-land" movement that has for its object the taking of temporary profits made possible by the present era of high prices must be followed by a reaction as soon as the opportunity for unusual profits disappears. The net result to Canada of such a

movement would seem to be questionable unless those who were recruited to its ranks were men of experience and ascertained competency in agricultural methods. Evidence is not lacking that many who have spent their lives in agriculture are failing to receive a fair return from their labor, due to the prevalence of conditions which should be, and can be, but which have not yet been rectified. Such being the case, we believe it to be the part of wisdom to concentrate our efforts towards the formulation of a plan that will provide a solid and permanent foundation for agricultural prosperity, rather than run any risk of settling a larger number of people in an occupation that they may soon find unprofitable, or at least unattractive.

Things to Strive For.

In our opinion, however, there are results, possible of immediate attainment, towards which we should strive. Without attempting in any way to deal exhaustively with this aspect of the problem, we would point out two things only for the purpose of illustration. In portions of our western provinces to-day there are thousands of immature hogs, whose owners have lost, or largely lost, the crops that were to have provided the feed needed to prepare those hogs for market. Local prices for feed have advanced to a point where it will not pay to purchase it. Unless something is done, and done at once, a valuable asset will be lost to Canada at the very time when other parts of the country, where feed is more plentiful, are complaining of a shortage of hogs. The obvious solutions of bringing feed to the hogs, or hogs to the feed, are inoperative because of freight rates and the lack of a proper system of distribution. What is to be done?

The Apple Question Again.

In the Province of Ontario to-day there are thousands of barrels of first-class apples that may never be harvested, because, it is alleged, it will not pay the farmers to pick them. Yet the Canadian west is crying out for apples it would be glad to buy in carloads at prices that should be remunerative to the producer. Again it may pertinently be asked, Cannot something be done ?

A complete survey of the situation would disclose many instances pointing to a threatened extinguishment of agricultural assets which under proper organization might easily be conserved. The minimizing of economic waste should be the particular care of our Governments. Especially at a time like the present, when all our resources should be utilized to the fullest extent in strengthening us for the world struggle in which we are engaged, should such problems be given close and careful study by those who could provide the necessary relief. We gladly record our appreciation of what has been done in this direction, both by our Federal and our Provincial authorities, but we would most strongly urge that they immediately co-operate in redoubled efforts to conserve and to bring to early fruition, in all parts of the Dominion, any potential asset which an exhaustive survey of the field may show to be in need of assistance.

To Improve Farm Life.

Dealing with the question of a permanent policy, we are unanimously of the opinion that something should, something must be done to make life upon the farm more attractive in all its aspects. If, as is generally admitted, agriculture lies at the very foundation of our national prosperity, it should be our duty, no less than our privilege, as Canadians to see that those who make this occupation their life work are surrounded by conditions that will make for their material welfare, their social happiness, and the proper education of their children.

The vista of possibilities comprised in these few words is enormous. Obviously, in the scope of a brief statement such as this, it will be impossible to do more than indicate a few of the points which a broad-based constructive policy of agricultural aid should embrace.

First, and perhaps foremost, there is a pressing need for more technical instruction, not so much that kind of instruction which a farmer can obtain only by going to an agricultural school or to an agricultural college, not so much that kind of instruction that is given from the platform at meetings of farmers' institutes or of grain-growers, but the kind if practical instruction that is brought to the farmer on his own farm, the kind of instruction that will result, for example, in the growing of two blades of grass where but one grew before. To provide such instruction that will in all cases be adapted to the peculiar needs of each community, will call for thorough organization and liberal expenditures of money.

Methods of Distribution.

Next, there is an urgent need for improved methods of distribution, both of the supplies which enter into thee everyday requirements upon the farm and of the produce which the farmer has prepared for market. Agriculture must necessarily lose whatever attraction it possesses if the tendency is for materials of all kinds to advance in price side by side with a diminishing return for the product of farm labor. The decadence which agriculture has suffered in certain districts can, we believe, be shown to have been due very largely to this cause. It should not be difficult to devise a remedy. A good deal has already been done by the farmers themselves; a great deal more remains to be done. Thorough organization, the application of modern business methods, and the widespread extension of the parcel post system would speedily effect a revolution in Canadian agriculture. The call is for able and public-spirited men to study the situation, to prepare the plan and to put it into operation.

Cheaper Transportation.

Another of the needs is for better and cheaper transportation from the farm to the ultimate market. Embraced under this heading is the problem of good roads, the problem of shipping and receiving facilities, the problem of rail rates and the problem of water rates. To arrive at an intelligent understanding of any of these would call for weeks of careful study; to devise and to apply the proper remedy would be a matter perhaps of years. Again the question arises, Who is to do it, and how is it to be financed ?

Kind Word for Railways.

In this connection it is but fitting that we should acknowledge with gratefulness the generous spirit with which the railroad companies have responded to appeals for relief in specific instances. With their help many a difficult situation has been successfully tided over, and we trust that friendly co-operation may long continue to characterize the relations of farming and transportation interests.

Cheaper money, or easier credit, is another requisite if agriculture, particularly in Western Canada, is to afford a return commensurate with the labor that is spent upon it. Very frequently the reason that more advantage is not taken of the opportunities which agriculture presents is, not that the farmer is not alive to those opportunities, but that he lacks the means and is unable to obtain the credit necessary to profit by them. It would also appear desirable to modify

the present practice of insisting that payments shall fall due immediately after the harvesting of a crop, for it frequently compels sacrifices which the farmer can ill afford. Neither of these reforms is likely to be accomplished by individual effort. Some improvement might be effected through organized effort. A great deal of much-needed relief could be afforded through the intervention of some properly constituted authority clothed with the necessary power.

To whatever extent the tariff is responsible for the handicaps under which the farmer has to labor, it should be carefully studied with a view to its rectification. If the lack of educational facilities in rural communities is a factor in depopulating our farmers, these facilities should be provided wherever possible and as conveniently as possible.

In brief, we return to the broad ground from which we set out: that life upon the farm in all its aspects must be made more attractive.

A Searching Investigation.

The deliberations of a meeting such as this would be incomplete if they did not result in something more than a definition of a few of the underlying weaknesses that stand in the way of our proper agricultural development. These weaknesses must be more fully studied and some machinery must be provided for their correction. The whole future of Canada, her attainment of the destiny which we believe awaits her as one of the first nations of the world, not only suggests but demands that her citizens as a whole apply themselves to this all-important problem.

We therefore place ourselves firmly on record as of the opinion that these and all other matters affecting the agricultural interests of Canada, particularly production, transportation, distribution, markets and finance, be made forthwith the subject of a searching investigation by a committee or board to be appointed, in accordance with the best British practice, with the least possible delay, by the Federal Government, that committee or board to be comprised of non-partisan men of outstanding ability, broad experience, high ideals and unquestioned probity, for the purpose, first, of thoroughly acquainting themselves with the needs which exist; second, of evolving and submitting to the Government in time for report to the approaching session of the Parliament of Canada a plan calculated to meet those needs; and, third, of putting that plan when approved or amended into execution, with power to act in matters of urgent need, with Government approval only.

Anticipating favorable action herein, we pledge ourselves, jointly and individually, to facilitate the work of the committee or board to the best of our ability, and we are empowering and instructing Messrs. Maharg, Henders, Tregillus, Sherrard and Cantley to strike committees for the fuller investigation of these matters on our own account, these committees to report to a future conference of agricultural, manufacturing, financial and transportation interests, to meet on the call of our Chairman, Mr. Henderson.

FRENCH BUYER IN MONTREAL.

C. C. Lacroix, formerly manager in London, Eng., for the Reith Bank of Paris, will open an office in Montreal as a purchasing representative of the French Government. He is understood to be negotiating with the Ross Rifle Co. before placing a $10,000,000 order. Mr. Lacroix says there has been such a heavy demand on French factories that the Government is compelled to place orders outside the Republic.

NEW TORONTO AGENCY.

M. Beatty & Sons, Welland, Ont., have opened a district office in the Builders' Exchange, 154 Simcoe Street, Toronto. Their representative is Mr. K. M. McKee.

BRITISH GOVERNMENT ASSUMES LEATHER BUSINESS.

Field-Marshal Earl Kitchener, Secretary of State for War, has issued a decree reserving all the hides of full grown cattle for military purposes. A special company having charge of the leather business of the country is organized. All the tanneries will be operated in connection with this company, receiving their quotas of hides which they are to tan for the army, from it.

RUBBER AND GRAPHITE EXPORTS PROHIBITED.

An Order-in-Council has been passed prohibiting the export from Canada of rubber and graphite except to the United Kingdom and British possessions.

BRITISH ORDERS FOR CHICAGO.

British orders for more than $15,000,000 worth of vehicles, automobiles, wagons, sleds, harness and equipment were brought back by Frederick S. Fish, of South Bend, Ind., who has just returned from England, according to a Canadian press despatch from Chicago. England has also contracted for 500 automobile trucks from a Kenosha, Wis., firm, while the French Government has ordered more than $1,000,000 in automobiles from a Jackson, Mich., factory.

Another war-time order made known was a British order for 5,000,000 one-pound tins of corned beef.

MORE WAR ORDERS.

Mr. Frederick Stobart, now at Montreal, as purchasing agent of the Imperial Government, has placed an order for 600,000 sweater coats, to be delivered by December 15th. The average price per dozen at which the coats are to be supplied is $18.

The Dominion Government has ordered 50,000 pairs of military boots.

EXCISE DUTIES FALL OFF.

Despite the increased excise duties on liquors and tobaccos imposed last August by the special session of Parliament, the excise revenue for the month of October shows a decrease of $315,724, as compared with October of last year, the total last month being $1,726,197. The decrease is about 17 per cent.

TOY ASSOCIATION FOR TORONTO.

An association known as the Trades Industrial Toy Association proposes to open a factory on Eastern Avenue, Toronto, for the manufacture of certain toys. The idea is to keep this as a factory for unemployed mechanics, giving the men from the different trades now out of work an opportunity to help themselves. The factory has been placed at their disposal by the Board of Control, and the manufacture of toys from waste material has already started. A grant of $50 was given by the Labor Council. Should the idea develop it is proposed to run the establishment on co-operative lines, that is to say, to give the workers the full benefits.

TRANSPORTATION

By J. E. WALSH

CANADIAN SAILINGS FOR DECEMBER.

THE following are the steamship sailings from Canadian ports in December:

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, *Niagara*, December 23; from Victoria, *Niagara*, December 23.

To Adelaide, Melbourne, Sydney—The New Zealand Shipping Company: From West St. John, *Borderdale*, December, 1914.

British West Indies.

To Bermuda, St. Kitts, Antigua, Barbadoes, Grenada, Trinidad, and Demerara—Royal Mail Steam Packet Company: From Halifax, *Chaleur;* from St. John, *Chaudiere*, December 20.

To Bermuda, St. Kitts, Antigua, Montserrat, Dominica, St. Lucia, St. Vincent, Barbados, Grenada, Trinidad,, Demerara—Royal Mail Packet Co.: From St. John, December 6; from Halifax, December 18.

To Santiago, Cuba, and Jamaica—Pickford & Black Line: From Halifax, *Amanda*, December 24.

To Turk's Island, Santiago, Cuba, and Jamaica—Pickford & Black Line: From Halifax, *Anita*, December 10.

China.

To Hong Kong—Blue Funnel Line: From Victoria, *Calchas*, November 25.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, *Niagara*, December 23; from Victoria, *Niagara*, December 23.

Great Britain.

To Avonmouth—Dominion Line: From Portland, Me., *Manxman*, December 19.

To Bristol—Canadian Northern Steamships, Ltd.: From Montreal, *Principello*, November 10.

To Glasgow—Blue Funnel Line: From Victoria, *Calchas*, November 25.

To Liverpool—Blue Funnel Line: From Victoria, *Calchas*, November 25. Furness Withy & Co., Ltd.: From Halifax, *Tabasco*, December 5; *Durango*, December 16; *Queen Wilhelmina*. White Star-Dominion Line: From Portland, Me., *Arabic*, December 2; from Halifax, *Arabic*, December 3; from Portland, Me., *Irishman*, December 5; from Portland, Me., *Canada*, December 12; from Halifax, *Canada*, December 13; from Portland, Me., *Cevic*, December 19; from Portland, Me., *Dominion*, December 26; from Halifax, *Dominion*, December 27.

To London—Blue Funnel Line: From Victoria, *Calchas*, November 25. Furness Withy & Co., Ltd.: From Halifax, *Kanawha*, December 5; *Digby*, December 15; *Rappahannock*, December 24.

To Manchester—Manchester Liners Ltd.: From St. John, *Manchester Citizen*, December 11; *Manchester Corporation*, December 25.

Hawaii.

To Honolulu—Canadian-Australasian Royal Mail Line: From Vancouver, *Niagara*, December 23. From Victoria, *Niagara*, December 23.

Japan.

To Yokohama, Kobe—Blue Funnel Line: From Victoria, *Calchas*, November 25.

New Zealand.

To Auckland—Canadian-Australasian Royal Mail Line: From Vancouver, *Niagara*, December 23. From Victoria, *Niagara*, December 23.

To Auckland, Wellington, Lyttelton, Dunedin—The New Zealand Shipping Co.: From West St. John, *Borderdale*, December, 1914.

C.P.R. WAR PROGRAMME.

The C.P.R. is co-operating in the most practical way with manufacturers by adding to the number of men they employ, thus increasing the purchasing power of the community. Six thousand extra laborers, for instance, have been employed by the Company for the two months preceding winter, and the general programme of construction, which means the employment of a large number of men, has been continued without any cessation owing to war conditions.

EXPENSES OF SOUTH AMERICAN TRAVELLING.

It is well known that the ordinary expenses of commercial travellers in South America are considerably greater than here. Without considering steamship fares, there are higher hotel bills, higher entertainment and travelling expenses, and in addition, large license fees to be paid.

It is said that ten dollars a day is about the minimum upon which a business representative may travel, and this does not include his fees. With this he can hardly be expected to entertain customers, or even return the courtesies that may be extended to him. Twenty dollars a day, and plenty of time, is the advice of travellers of experience.

One large expense of opening a South American market is the license fee which commercial travellers must pay almost everywhere. In Argentine, for instance, there is a fee for the city of Buenos Aires and an additional fee for the province in which it is situated. In every one of the twelve provinces a separate license must be obtained, and the Argentine Government issues a separate license for each of the territories. These licenses vary in amount from $80 to $200 in the case of every province or territory; they also vary according to the way that a commercial traveler does business, whether selling from catalogue and sample, or from stock carried with him, or on commission. The fee varies also according to the kind of goods sold. There is a different fee for wholesalers and retailers. The largeness of the fee makes most economical a thorough and extended canvass of every locality that a salesman visits. The native language of every South American locality it is well to know, but most business men of any prominence speak French, and there are many who speak German and English—"*The Americas.*"

INSVRANCE

THE approach of winter brings forward the question of the protection against freezing of the contents of fire ıe protection against freezing of the contents of fire pails and barrels. The substance most widely used for this purpose is calcium chloride, which has been found vastly superior to common salt, particularly where very low temperatures are to be dealt with. Calcium chloride makes a colorless solution when dissolved in water and, unlike salt, does not rust metal. It has no odor and will remain odorless even if left standing a long time. The following table shows the temperature at which water will freeze with given quantities of calcium chloride in solution:

Pounds per Imperial Gallon of water	Temperature of Freezing.
1½ lbs.	+25 deg. Fahr.
2½ "	+18 " "
3 "	+ 3 to 4 " "
4¼ "	— 8 to 11 " "
5 "	—17 to 19 " "
6 "	—39 to 41 " "

The use of calcium chloride also tends greatly to diminish evaporation, although not entirely preventing it. Where this solution is used, wooden barrels should first be well coated inside with asphaltum or with a mixture of crude paraffin and resin to prevent shrinking of staves and consequent leakage.

Records of the National Fire Protection Association plainly show how fires may be caused through the contact of steam-heating pipes with floors or other wooden parts of buildings. Steam heat drives out the moisture and resinous substances from wood, which is then left in a condition to absorb oxygen. Any steam pipe, no matter how low the pressure of steam, will in time char wood in contact with it. The temperature of steam, even at low pressure, is very high. A pressure of 15 lbs. results in a temperature of 250 deg. F.; 50 lbs. equals 298 deg. F.; and 100 lbs. equals 338 deg. F., therefore carbonization takes place where least expected. Charcoal has the property of absorbing gases to a most remarkable degree, and charred wood, when cooled, will absorb oxygen more readily than if kept heated continuously. The charcoal thus produced at a low temperature will have a low ignition point. The *N. F. P. A. Quarterly*, January, 1911, gives fifty well authenticated cases of fire from the charring of wood and other substances.

Why Sprinklers Failed at Salem.

The reason for the burning of so many sprinklered risks at Salem has been explained by the secretary of the National Automatic Sprinkler Association. Briefly, it is that automatic sprinkler systems need water in sufficient quantity and adequate pressure to perform efficient service, and this was lacking. Elaborating rules for sprinkler systems and then accepting "any old thing" in the way of waterworks and water supplies, will not avert disaster. Salem's water supply was decidedly sub-standard. Before the fire started the normal pressure was fifty pounds. Ten minutes after the fire started the pressure had dropped to twenty pounds.

The primary function of the automatic sprinkler system is to control the fire at the point of origin. In the building where the fire started there was no automatic sprinkler protection. The owner had been prompted to consider automatic sprinkler protection several years ago when a nearby factory burned, and specifications for a sprinkler system were drawn up by the Underwriters' Bureau of New England, but for some reason, sprinklers were not installed.

Gorham Dana, manager of aforesaid bureau, says that if automatic sprinklers had been installed the conflagration would have been averted.

Fire Losses.

The losses by fire in the United States and Canada during the month of August, as compiled from the records of the *Journal of Commerce and Commercial Bulletin*, aggregate $11,765,650, a very great reduction from the same month last year. The following table gives a comparison of the losses by months this year with those of the same months in 1913 and 1912, together with the monthly record for the balance of those years:

	1912	1913	1914
January	$35,653,150	$20,193,250	$23,204,700
February	28,601,650	22,084,600	21,744,200
March	16,650,850	17,511,000	25,512,750
April	16,349,400	16,738,250	17,700,800
May	21,013,950	17,225,850	15,507,800
June	16,103,450	24,942,700	29,348,008
July	15,219,100	20,660,900	17,539,800
August	14,158,800	21,180,700	11,765,650
Total for 8 months.	$163,750,350	$160,087,250	$162,323,700
September	13,779,300	17,919,300	.....
October	13,651,650	14,932,750	.....
November	16,172,300	15,207,600	.....
December	17,967,000	16,126,450	.....
Total for year.	$225,320,900	$224,723,350	.....

August, from a fire underwriting standpoint, was the only month this year that offered any hope of profit. It goes a long way towards compensating for the heavy Salem losses. It is noteworthy that of the large fires in August quite a number had little or no insurance. However, the losses for 1914 so far have been so heavy that it is clear that fire underwriters generally will lose on the year.

Fires in British Columbia.

The annual report of the Superintendent of Insurance for British Columbia shows that fully 75 per cent. of the fires reported was due to carelessness in the construction of buildings or in the installation of lighting, heating and power appliances and in the use of such appliances and of combustibles. Accumulation of rubbish and defective stoves, furnaces and heating apparatus and lack of proper provision for ashes and fire-breeding wastes are shown to be responsible for many fires and municipalities and fire wardens are urged, as a commencement, in the direction of public education, to arrange for "clean-up" days in their several jurisdictions before the cold weather sets in. On the day appointed, rubbish would be removed from attics, cellars and yards, and there would be a general overhauling of heating and lighting appliances, and proper and safe provision would be made for the disposal of ashes and rubbish during the winter months.

The British Columbia Fire Insurance Act, in addition to

providing for the investigation of fires, as well for purposes of ascertaining fire-creating conditions as of detecting crime, empowers chief of fire departments to order the removal of combustibles and the remedying of dangerous conditions. Inspection by qualified members of fire departments is to be recommended, care being taken that the fire fighting force is not impaired. To be effective, inspection should be systematic and thorough, and followed up by the enforcement of by-laws and the enactment of new by-laws if shown to be necessary. There is no doubt that where this practice is carried out it brings about improvements in conditions and promotes carefulness. Twenty-one fires, alleged to have been due to suspicious circumstances, were investigated by the department during the year. In one case reported to the fire department the local authorities had sufficient evidence to convict three persons.

TARIFF

By J. R. K. BRISTOL

Board of Customs Decisions.

SWANSDOWN trimming, declared dutiable under tariff item 711.

Concord leather link belting, composed of small pieces of leather held together with iron rivets, per sample, declared dutiable under tariff item 609.

Pressed felt buffing wheels, per sample, declared dutiable under tariff item 567.

"Wincarnis" wine, manufactured by Messrs. Coleman and Company, Norwich, England, declared dutiable under tariff item 220 at 60%.

Departmental Rulings.

Appraisers' Bulletin 630, page 14, "Foil, metal, composition foil, item 343" add the words "found to be genuine tin foil."

Coated cloth sewn together to be used as a binding for hat sweats, ruled to be free under item 638 (*a*) when for the manufacture of hats.

Cotton hat linings for straw hats, ruled to be not entitled to free entry under item 638, as hatters' tips and sides; but held to be subject to drawback of 99% for home consumption, under tariff item 1012.

Fire Brick, November, 1914—Cancelling Appraisers' Bulletins Nos. 653 and 660.

Fire Brick.

Declaration of Board of Customs, Ottawa, 10th November 1914, re Item 261, Customs Tariff, 1907.

That the following fire brick shall be rated as of a class or kind not made in Canada, and admitted free of duty, viz.:

(1) Rectangular fire brick. Ordinary 9 in. x 4¼ in. x 2½ in., valued at over $16 per thousand at place of export—the estimated weight of each such brick being 6 lbs. 13 ozs.

(2) Other rectangular bricks of fire clay not over 9 in. long, nor over 4½ inches wide, nor over 2½ inches thick, values at more than 23½c. per 100 lbs. at place of export.

These rectangular bricks include shapes known as "Splits" 9 in. x 4½ x 2 in. and "Soaps" 9 in. x 2½ in. x 2¼ in.

(3) "Key" brick for arches of smelting or reduction furnaces.

(4) "Neck" bricks for smelting or reduction furnaces.

(5) Edge bricks for smelting or reduction furnaces.

(6) Magnesite fire brick.

(7) Silica fire brick when composed of not less than 90% silica.

That the following fire brick shall be rated as subject to duty under item 282 of the Customs Tariff, 1907, viz.:

(*a*) Rectangular fire brick when valued at not more than $16 per thousand for the ordinary size, 9 in. x 4¼ in x 2½ in.;

(*b*) Other rectangular fire brick valued at not more than 23½ cents per 100 lbs.;

(*c*) All flat bricks of fire clay 6 in. x 6 in. x ½ in. and up to 48 in. x 30 in. x 9 in.;

(*d*) All "cupola blocks" of fire brick, large or small;

(*e*) All circle bricks made from fire clay;

(*f*) All fire brick, stove linings and annealed furnace linings;

(*g*) All locomotive fire brick blocks, rotary kiln blocks and combustion chamber blocks for engines;

(*h*) Hollow blocks, hollow shapes, gas retorts, crucible rests, spouts and runner brick composed of fire brick.

In effect Nov. 20, 1914.

Special or Dumping Duty.

Under Memo. 1812-B many customs officers held that the clause limiting the special duty to 15% *ad valorem* was no longer in force; and that the whole difference between the fair market value as sold for home consumption and the selling price to the purchaser in Canada should be collected as special duty even wheen exceeding 15% *ad valorem*. This application of the law, however, has been ascertained not to be correct; and the Department of Customs has ordered that special duty shall not in any case exceed 15% *ad valorem*.

Statistics.

The following statistical headings appear in the Trade and Navigation Returns:

"Other manufactures, articles, or wares, of iron or steel, or of which iron or steel, or either are the component materials of chief value, n.o.p., $11,765,265.

"All machinery composed wholly or in part of iron or steel, n.o.p., and iron or steel castings, and iron or steel integral parts of machinery, $19,789,912."

The Department of Customs has furnished the Association with an itemized statement of the principal articles imported under each of above headings. This list was published in the last issue of INDUSTRIAL CANADA. Any item in such list that is of interest to Canadian manufacturers can be amplified by figures showing the value of such importations.

Lifting Embargo on Wool from United Kingdom.

The Customs Department has lifted the embargo on wool by the following order:

"Regulations respecting the entry of raw wool and certain woolen goods imported from the United Kingdom.

"In regard to raw wool tops, noils, and yarn, of wool and wool cloth suitable for military clothing, flannels and woolen underclothing, imported from the United Kingdom, it is ordered under the circumstances of their exportation to Canada, that the said goods on arrival at the port of destination shall be entered for warehouse and shall be ex-warehoused only, upon an undertaking by the importer in writing, on the face of the entry to the satisfaction of the Collector, that the materials herein described shall be used only for the manufacture of goods in Canada and that the goods so manufactured shall be sold or disposed of for use in Canada, or for export to the United Kingdom and not otherwise.

"Collectors of Customs are required to use their best endeavors to ensure that the conditions of these ex-warehouse entries are faithfully observed.

(Signed) "JOHN McDOUGALD,
"*Commissioner of Customs.*"

Raw Wool from Australia.

In respect to raw wool imported from Australia it was ordered in regulations dated, November 14th, 1914, that same should be subject to conditional entry the same as if imported from the United Kingdom.

Embargo on Hides from United States owing to Foot and Mouth Disease, lifted conditionally.

Governing Hides Imported from United States.

The following are the regulations (dated Nov. 13, 1914), under which hides may be imported from the United States; viz.:—

"Foreign hides, that is, hides from countries other than the United States, may be admitted to Canada from United States when the shipment is accompanied by the affidavit of the shipper that the shipment is of foreign origin, and that the said hides have not come in contact with domestic hides of the United States.

"United States hides will only be admitted when accompanied by the certificate of an officer of the Bureau of Animal Industry that they have been thoroughly disinfected under their regulations.

"Men employed in handling and unloading hides will be required to wash and disinfect their hands before leaving the premises.

"Dated at Ottawa, this thirteenth day of November, 1914.

(Signed) "GEO. P. O'HALLORAN,
"*Deputy Minister of Agriculture.*"

Embargo on United States Wool Owing to Foot-and-Mouth Disease Lifted Conditionally.

The following are the regulations dated November 13, 1914, under which wool may be imported from the United States, viz.:—

"Foreign wool, from countries other than the United States, in the original bales, will be admitted from United States when accompanied by the affidavit of the owner that the bales have not been stored with or come in contact with prohibited wools or pelts of the United States.

"Fleece wool shorn from living sheep during or previous to the spring of 1914 may be expected to be free from infection and will be admitted if not mixed or stored with other classes of wool prohibited in these regulations. An affidavit of the shipper will be required to this effect.

"Pulled wool will be excluded unless the wool has been previously secured, and after the scouring process has been dried at a temperature of not less than 200 degrees F. Affidavit of the shipper to this effect will be required to accompany shipment.

"If deemed necessary at any time any shipment of wool may be required to undergo disinfection by means of formaldehyde under the supervision of an officer of this Department.

"The importation of pelts in the uncured state is prohibited.

"Tanned sheep skins with the wool attached will only be admitted after fumigation with formaldehyde.

"Importers will be required to furnish all the necessary disinfectants and conveniences for the carrying out of these regulations."

Straw or Hay.

Under the embargo against United States products owing to the foot-and-mouth disease, on the 19th inst., the Department of Agriculture issued further regulations as follows, dealing with straw or hay packing, hair, pickled pelts of sheep or goats and cooked meats:—

"Straw or hay used in packing fragile merchandise imported from foreign countries via the United States, will be admitted provided the goods are contained in their original packages.

"Straw or hay used in packing merchandise from the United States will be admitted provided the shipment is accompanied by an affidavit that the said straw or hay was harvested prior to the 1st day of August, 1914, and had not been in contact with any infected animal or material.

"Hair from countries other than the United States will be admitted under the same conditions as wool.

"Hair from the United States will be refused entry, unless accompanied by a certificate of an officer of the Bureau of Animal Industry that the said hair is free from infection.

"Pickled pelts of sheep or goats with wool or hair removed, packed in casks or bundles, will be admitted.

"Cooked meats, such as sausages, will be admitted."

On the same date the following further regulation was issued on this subject:—

Foot-and-Mouth Disease—Exemptions.

Referring to Memo. 1842 B and 1847 B concerning animals and articles prohibited to be imported from United States on account of Foot-and-Mouth Disease, it is decided that the goods known in the wool trade as noils, combed tops, shoddy and garnetted waste are not covered by the general prohibitory Order of the 9th inst., as interpreted by the Department of Agriculture and should be admitted into Canada without restriction.

"Notwithstanding the general prohibition contained in the Ministerial Order of the 9th instant, horses consigned to the Military authorities may be admitted into Canada provided that on arrival of such horses at the frontier port, the Customs Officer shall at once notify the Vetrinary Inspector who will examine the horses and carry out such instructions as he may have received from the Veterinary Director-General for the disinfection of cars, etc."

The Order dated November 23rd, under "The Animal Contagious Diseases Act" of date the 9th day of November, 1914, as amended by Orders of date the 11th, 13th and 19th of November, 1914, is hereby further amended by changing the

temperature at which pulled scoured wool is dried from 200 degrees F. to 160 degrees F., and by adding also the following:

"Pulled wool, unscoured, may be admitted if accompanied by an affidavit that it was taken from the pelts of sheep killed before the 1st day of August, 1914, and has not come in contact with prohibited wools.

"Wool which is accompanied by the certificate of an officer of the Bureau of Animal Industry to the effect that it has been disinfected with formaldehyde under his supervision, may be admitted.

"Hides and hay, in sealed closed cars may be allowed transit through Canada from one United States point to another, provided the steps and running boards are disinfected to the satisfaction of an officer of this Department previous to entering Canada.

"Tanned sheepskins may be admitted, if accompanied by the affidavit of the shipper that they are derived from sheep killed prior to August 1st, 1914, and have not been in contact with prohibited wools or skins.

"Skins of wild fur-bearing animals, tanned or untanned, may be admitted."

Invoices Covering Shipments to the United States.

The question of invoices covering shipments to the United States has been taken up with the United States authorities; and the Department of State, Washington, has issued instructions to the effect that shipments sold by a firm in Canada to a number of persons in the United States, at different destinations, but which are forwarded together on one bill of lading to one consignee at the port of entry for distribution from that point to the different purchasers, may be consulated on one Consular invoice. Also that in such case, Invoice Form No. 138 should be used, and the names of the actual purchasers should be set forth in the invoice."

Gold and Silver Articles Prohibited.

The Collector of Customs issued the following Memorandum on November 16th:

Gold and Silver articles imported in contravention of Tariff Item 1209 should be seized and the seizure reported on Form K-9.

Tariff Item 1209 prohibits (*a*) the importation of goods which if sold would be forfeited under the provisions of Part VII of the Criminal Code.

Under these provisions articles of gold or silver bearing a false trade description are liable to seizure.

The following are specimens of false trade descriptions:—

(1) Watch cases, marked "Solid gold," "Gold filled" or "Coin silver"—when made of base metals and only plated.

(2) Watch movements, marked "Railroad Special," "21 Jewel" when not containing any jewel, or containing a less number of jewels than as stated.

Silver plated ware made in the United States and marked "Sheffield" with Crown and Anchor is also subject to seizure under subsection (*b*) of Tariff Item 1209, unless accompanied by a definite indication of the foreign state or country in which the goods were made or produced.

The following is an extract from Schedule C of the Customs Tariff, 1907, viz.:—

Prohibited Goods.

1209. Any goods—(*a*) which, if sold, would be forfeited under the provisions of Part VII of the Criminal Code; or,

(*b*) Manufactured in any foreign state or country which bear any name or trade mark which is or purports to be the name or trade mark of any manufacturer, dealer or trader in the United Kingdom, or in Canada, or in any other British country, unless such name or trade mark is accompanied by a definite indication of the foreign state or country in which the goods were made or produced;

Provided that for the purposes of this item if there is on any goods a name which is identical with or a colourable imitation of the name of a place in the United Kingdom, or in Canada, or in any other British country, such name, unless it is accompanied by the name of the state or country in which it is situate, shall, unless the Minister decides that the attaching of such name is not calculated to deceive, (of which matter the Minister shall be the sole judge) be treated as if it was the name of a place in the United Kingdom, or in Canada, or in any other British country.

PROHIBITION OF EXPORTS TO CERTAIN FOREIGN PORTS IN EUROPE AND IN THE MEDITERRANEAN.

The following Order-in-Council was issued at Ottawa on October 29th:

The exportation from Canada of the following articles to all foreign ports in Europe and on the Mediterranean and Black Seas, with the exception of those of France, Russia (except the Baltic ports), Spain and Portugal, is hereby prohibited:

Graphite suitable for the manufacture of crucibles.

Range finders.

Motors of all kinds.

Motor tires.

Nickle and nickle ore.

Woolled sheep skins.

Warships, including boats and their distinctive and component parts of such a nature that they can only be used on a vessel of war.

Aeroplanes, airships, balloons and air craft of all kinds, and their component parts, together with accessories and articles recognizable as intended for use in connection with balloons, airships and air craft.

Feeding stuffs for animals and all food stuffs and raw materials for same.

Gold and silver in coin or bullion, paper money.

Vehicles of all kinds available for use in war and their component parts.

Vessels, craft and boats of all kinds, floating docks, parts of docks, and their component parts.

Powder and explosives not specially prepared for use in war.

Barbed wire and implements for fixing and cutting same.

Chronometers, and all kinds of nautical instruments.

Copper, unwrought.

Lead, pig, sheet or pipe.

Hematite iron ore.

Magnetic iron ore.

Hides and skins, raw or rough tanned (but not including dressed leather).

Rubber.

Trading with the Enemy.

The following Order-in-Council was issued at Ottawa on October 30th:

1. Any person, who, during the present war, trades or has, since the 4th day of August, 1914, traded with the enemy within the meaning of these Orders and Regulations shall be guilty of a misdemeanor and shall—

(*a*) On summary conviction be liable to imprisonment with or without hard labor for a term not exceeding 12 months, or to a fine not exceeding $2,000, or to both such imprisonment and fine; or

(*b*) On conviction or indictment be liable to imprisonment for a term not exceeding 5 years, or to a fine not exceeding $5,000, or to both such imprisonment and fine; and the Court may in any case order that any goods or money in respect of which the offence has been committed be forfeited.

2. For the purposes of these Orders and Regulations a person shall be deemed to have traded with the enemy if he has entered into any transaction or done any act, which was at the time of such transaction or act, prohibited by or under any proclamation issued by His Majesty dealing with trading with the enemy for the time being in force, or which at common law, or by statute or by or under these Orders and Regulations constitutes an offence of trading with the enemy.

Provided that any transaction or act permitted by or under any such proclamation shall not be deemed to be trading with the enemy.

3. Where a company has entered into a transaction or has done any act which is an offence under these Orders and Regulations, every Director, Manager, Secretary or other Officer of the Company, who is knowingly a party to the transaction or act, shall also be deemed guilty of the offence.

4. A prosecution for an offence under these Orders and Regulations shall not be instituted except by or with the consent of the Attorney-General of Canada.

Provided that the person charged with such an offence may be arrested and a warrant for his arrest may be issued and executed, and such person may be remanded in custody or on bail, notwithstanding that the consent of the Attorney-General of Canada to the institution of the prosecution for the offence has not been obtained, but no further or other proceedings shall be taken until that consent has been obtained.

5. Where an act constitutes an offence both under these Orders and Regulations and under any statute, or both under these Orders and Regulations and at common law, the offender shall be liable to be prosecuted and punished under either these Orders and Regulations, or such statute, or at common law, but he shall not be liable to be punished twice for the same offence.

6. Subject to the provisions of Order 4 of these Orders and Regulations any offence declared and any penalty or forfeiture imposed or authorized by these Orders and Regulations may be prosecuted, recovered or enforced by summary proceedings and conviction under the provisions of Part XV of the Criminal Code.

LEGISLATION

By F. W. WEGENAST

THE sweeping effect of the John Deere decision as gathered from the cable despatches is enhanced by the full text of the judgment which has since come to hand. Not only is the specific question raised on the appeal definitely and conclusively decided but the decision is placed on so broad a basis that it covers to a large extent, directly and by inference, the ground of the general Companies Reference, which is also shortly to come before their Lordships on appeal. In fact it would appear from the press despatches that in giving leave to appeal in the Companies Reference the Privy Council stated that as to some of the questions they considered they had given their answers in the John Deere case and that in view of these answers it might be unnecessary to decide some of the other questions on the Reference.

Powers of Provincial Company.

The main question left outstanding is as to the inherent capacity of a provincial company to go outside the boundaries of its incorporating province. The question is also raised in a concrete case of Bonanza vs. The King, which is now before the Supreme Court, in which the issue is whether a mining company incorporated in the Province of Ontario has power to open mines in the Yukon. The argument in the John Deere case proceeded largely on the assumption that a provincial Legislature could not have incorporated such a company as the John Deere Plow Company with power to carry on business throughout the Dominion, but until the matter is dealt with in some more definite form it will be the subject of grave doubt if and to what extent a provincial company may, even with the consent of other provinces, exercise any of its powers outside its own province.

For the first time since Confederation the paramount jurisdiction of the Dominion over trade and commerce has received official judicial recognition. Many times the argument has been used before the Courts that this or that piece of provincial legislation was invalid as encroaching upon the Dominion's jurisdiction over trade and commerce, but never before has the argument prevailed. The following quotation from the judgment in the John Deere case is therefore highly significant and important:

"Their Lordships find themselves in agreement with the interpretation put by the Judicial Committee in Citizens Insurance Co. vs. Parsons (7 A.C. at pp. 112, 113), on head 2 of section 91, which confers exclusive power on the Dominion Parliament to make laws regulating trade. This head must like the expression, 'property and civil rights in the Province,' in s. 92, receive a limited interpretation. But they think that the power to regulate trade and commerce at all events enables the Parliament of Canada to prescribe to what extent the powers of companies the objects of which extend to the entire Dominion should be exercisable, and what limitations should be placed on such powers. For if it be established that the Dominion Parliament can create such companies, then it becomes a question of general interest throughout the Dominion in what fashion they should be permittted to trade. Their Lordships are therefore of opinion that the Parliament of Canada had power to enact the sections relied on in this case in the Dominion Companies Act and the Interpretation Act. They do not desire to be understood as suggesting that because the status of a Dominion company enables it to trade in a province and thereby confers on it civil rights to some extent, the power to regulate trade and commerce can be exercised in such a way as to trench, in the case of such companies, on the exclusive jurisdiction of the provincial Legislatures over civil rights in general. No doubt this jurisdiction would conflict with that of the province if civil rights were to be read as an expression of unlimited scope. But, as has already been pointed out, the expression must be construed consistently with various powers conferred by ss. 91 and 92, which restrict its literal scope. It is enough for present purposes to say that the province cannot legislate so as to deprive a Dominion company of its status and powers. This does not mean that these

powrs can be exercised in contravention of the laws of the province restricting the rights of the public in the province generally. What it does mean is that the status and powers of a Dominion Company as such cannot be destroyed as such by provincial legislation. This exclusion appears to their Lordships to be in full harmony with what was laid down by the Board in Citizens Insurance Co. vs. Parsons (7 A.C. 96); Colonial Building Association vs. The Attorney-General for Quebec (9 A.C. 157), and Bank of Toronto vs. Lambe (12 A.C. 575).

"It follows from these premises that those provisions of the Companies Act of British Columbia which are relied on in the present case as compelling the appellant company to obtain a provincial license of the kind about which the controversy has arisen, or to be registered in the province as a condition of exercising its powers or of suing in the courts, are inoperative for these purposes. The question is not one of enactment of laws affecting the general public in the province and relating to civil rights, or taxation, or the administration of justice. It is in reality whether the province can interfere with the status and corporate capacity of a Dominion company in so far as that status and capacity carries with it powers conferred by the Parliament of Canada to carry on business in every part of the Dominion. Their Lordships are of the opinion that this question must be answered in the negative."

The Companies' Reference Case.

As to the general Companies Reference and the judgment of the Supreme Court thereon, their Lordships expressed themselves as follows:

"In the course of the argument their Lordships gave consideration to the opinions delivered in 1913 by the judges of the Supreme Court of Canada in response to certain abstract questions on the extent of the powers which exist under the Confederation Act for the incorporation of companies in Canada. Two of these questions bear directly on the topics now under discussion. The sixth question was whether the Legislature of a Province has power to prohibit companies incorporated by the Parliament of Canada from carrying on business within the province in the absence of a license from its Government, if fees are required to be paid upon the issue of such license. The seventh question was whether the provincial Legislature could restrict a company so incorporated for the purpose of trading throughout the whole Dominion in the exercise of the special trading powers so conferred, or could limit such exercise within the province. This question further raised the point whether a Dominion trading company was subject to provincial legislation limiting the business which corporations not incorporated under the legislation of the province could carry on, or their powers, or imposing conditions on the engaging in business by such corporations, or restricting a Dominion company otherwise in the exercise of its corporate powers or capacity.

"Their Lordships have read with care the opinion delivered by the members of the Supreme Court, and are impressed by the attention and research which the learned judges brought to bear, in the elaborate judgments given, on the difficult task imposed on them. But the task imposed was, in their Lordships' opinion, an impossible one, owing to the abstract character of the questions put. For the reasons already indicated it is impracticable to attempt, with safety, definitions marking out logical disjunctions between the various powers conferred by the 91st and 92nd sections and between their various subheads *inter se*. Lines of demarcation have to be drawn in construing the application of the sections to actual concrete cases, as to each of which individually the courts have to determine on which side of a particular line the facts place them. But while in some cases it has proved, and may hereafter prove, possible to go further and to lay down a principle of general application, it results from what has been said about the language of the Confederation Act, that this cannot be satisfactorily accomplished in the case of general questions such as those referred to. It is true that even when a company has been incorporated by the Dominion Government with powers to trade, it is not the less subject to provincial laws of general application enacted under the powers conferred by section 92. Thus, notwithstanding that a Dominion company has capacity to hold land, it cannot refuse to obey the statutes of the province as to mortmain (Colonial Building Association vs. Attorney-General of Quebec, 9 A.C. 157 at p. 164); or escape the payment of taxes, even though these may assume the form of requiring, as the method of raising a revenue, a license to trade which affects a Dominion company in common with other companies (Bank of Toronto vs. Lambe, 12 A.C. 575). Again, such a company is subject to the powers of the Province relating to property and civil rights under s. 92 for the regulation of contracts generally (Citizens Insurance Co. vs. Parsons, 7 A.C. 96)."

TORONTO SHELLS SATISFACTORY.

The Canada Foundry Company Works at Davenport Road have received instructions to proceed carte blanche with the manufacture of shells for the Government. Fourteen of the shells which were recently shipped as a sample to England proved satisfactory.

The other firms making these shells are Chapman Ball Bearing Co., Canadian Fairbank Co., and the John Inglis Co.

SHOES FOR FRENCH GOVERNMENT.

Final arrangements are now being made for the filling of an order of boots for the French Government by various Quebec shoe factories. The first word of the order came from the Province of Quebec's agent in London, England, Hon. Dr. Pelletier, acting in conjunction with Hon. P. Roy, the Canadian Commissioner in Paris. Shoe manufacturers of Maisonneuve have received orders for 500,000 pairs of military boots and a further contract for 700,000 pairs is expected to be signed shortly.

WOOD-USING INDUSTRIES OF MARITIME PROVINCES.

Bulletin No. 44 of the Forestry Branch of the Department of the Interior has been compiled from reports received from over six hundred manufacturers in the Maritime Provinces, a classified list of whom is given. Since it is a study of conditions rather than a census, its figures are likely to be under, rather than over, the mark. It shows that, aside from the export trade, at least two hundred million feet of timber are annually required to supply the wood-using industries of New Brunswick, Nova Scotia and Prince Edward Island. The value of this material is over $3,684,000. Twenty-eight different kinds of wood are used. The industries are divided into the following: wood-pulp, building construction, cooperage, boxes, cars, boats, furniture, coffins, foundry boxes, vehicles, machinery parts, patterns, agricultural implements, handles and fruit baskets. The bulletin forms a pamphlet of one hundred pages, in which the subject is treated in all its relations.

DEATH OF MR. HOUSSER.

INDUSTRIAL CANADA mentions with regret the death of John H. Housser, of the Massey-Harris Company, Toronto. The deceased was well and favorably known among Canadian manufacturers.

AUSTRALIA BUYS MUCH MANUFACTURED GOODS

Canadian Manufacturers Should be Able to Increase their Sales of Manufactures to Australia While the Pressure of European Competition is Lessened

THE importation of manufactured goods into Australia has doubled since 1903, when it amounted to $184,000,000; in 1913, it was $388,000,000.

Australia's purchases of manufactured goods in 1912 were as follows:—

Piece Goods.

Canvas and duck	$1,550,579
Other cotton and linen piece goods	22,606,562
Hessians and other jute piece goods	1,244,968
Horsehair and hop cloths	197,161
Silk or partly silk	4,892,239
Velvets, plushes, veilings, etc.	5,127,666
Woolens, or containing wool	11,714 586

Wearing Apparel and Materials.

Fur	$339,940
Materials cut into shape	9,629,684
Minor articles	2,057,508

Metals and Manufactures.

Iron bars, rods, angles	5,393,727
Girders, beams, columns	1,390,255
Steel hoops	361,099
Ingots, blooms, puddled bars	316,596
Pig iron	1,122,410
Plates and sheets	12,212,614
Tinned plates and sheets	2,505,571
Rails, fish plates, etc.	6,326,964
Scrap iron	356,949
Nails and brads	390,576
Bolts, nuts, rivets, washers	874,793
Locks	400,805
Plain brass pipes and tubes	506,870
Brass, bronze and gun-metal work	399,121
Metal pipes and tubes	4,507,747
Barbed wire	4,847,949
Wire netting	1,982,452
Cutlery, n. e. s.	1,580,805
Electrical and gas appliances	2,060,379
Other electrical material	3,394,603
Adding and computing machines	364,384
Agricultural implements	2,537,102
Chain and travelling blocks	213,869
Churns	90,308
Cream Separators	445,675
Gas and oil engines	850,825
Locomotives	2,280,306
Portable and traction engines	830,731
Electrical engines and parts	2,464,688
Washing appliances	167,417
Mining machinery	469,393
Printing machinery	886,044
Sewing machines	1,489,679
Typewriters	533,154
Weighing machines	195,499
Machine tools	770,931
Other tools	3,389,065

Vehicles.

Bicycles, tricycles, motorcycles and parts	1,874,811
Bodies for motor cars and wagons	1,071,058
Chassis for motor cars and wagons	7,063,701

Arms and Ammunition.

Arms	1,093,780
Cartridges	816,010

Paper and Manufactures.

Cardboard and pasteboard	734,841
Printing paper	4,411,146
Wrapping paper	915,394
Writing paper	1,483,324

Leather and Manufactures.

Gloves	2,105,370
Patent and enameled leather	654,435
Leather cut for harness	866,782
Hides and skins	1,000,558
Other leather	1,785,645

Chemicals and Drugs.

Cream of tartar	929,589
Disinfectants	222,735
Medicines	1,486,230
Industrial chemicals	4,313,846
Chemical fertilizers	2,752,240

Glass and Glassware.

Glass	1,396,238
Bottles, flasks and jars	1,391,751

Wood and Manufactures.

Picture and room moldings	169,753
Furniture, wood and wicker articles	2,067,898
Timber	13,882,290
Tool handles	215,279

Tobacco and Manufactures.

Manufactured tobacco	1,021,824
Unmanufactured tobacco	2,982,459
Cigars and cigarettes	1,080,319

Oils.

Benzine, gasoline and mineral naphtha	2,628,903
Castor oil	262,504
Cottonseed oil	96,401
Petroleum burning oils	3,115,755
Linseed oil	1,269,378
Mineral lubricating oil	1,011,590
Paraffin	300,857
Turpentine	375,042
Linseed cake and oil	448,380

Spirits and Wines.

Brandy	572,934
Gin	856,704
Rum	204,184
Whiskey	3,494,541
Wine	823,446

Breadstuffs.

Barley	532,717
Corn flour	32,790
Maize	1,062,031
Infant's and invalid's food	676,035
Oats	1,940,422

Miscellaneous.

Bags and sacks	4,908,639
Boots and shoes	2,991,768
Belting	534,916
Carpet and carpeting	848,000
Clocks and watches	1,558,380
Confectionery	2,314,717
Corsets	1,284,853
Cordage and twine (metal)	594,258
Other cordage, twine and netting	917,403
Curtains, blinds and parts	597,309
Cushions, cozies, furniture drapery	2,399,150
Embroidery threads, twists and silks	2,068,136
Fish, preserved in tins	2,953,815
Fresh and cold storage fish	274,451
Floor cloths and linoleum	3,455 697
Hats, caps, bonnets and material	3,050,269
Jewelry	3,584,435
Lamps and mantles	966,083
Lard, lard oil and refined fats	107,530
Paints, colors and varnishes	3,293,944
Phonographs and graphophones	689,204
Musical instruments	3,286,874
Portland cement	1,273,466
Printed books	3,336,823
Rubber manufactures	4,840,951
Soap	651,329
Socks and stockings	3,663,871
Surgical and dental instruments	703,501
Telephones and appliances	801,186

CATALOGUES AND BULLETINS RECEIVED.

Overhead Travelling Cranes—Herbert Morris Crane and Hoist Company, Ltd., Toronto.

Automobile Screw Plates—Butterfield & Co., Rock Island, Quebec.

Store Fronts—Kawneer Mfg. Co., Ltd., Guelph, Ont.

BRITISH INDUSTRY NORMAL.

Only in cotton spinning is British industry suffering on account of the war. In addition to supplying the expeditionary force and the new army with clothing and equipment, Russia has placed orders for a million pairs of boots, and the British woollen mills and shoe factories have other contracts they are as yet unable to place.

COMMUNITY FARMING FOR WESTERN CANADA.

A Scheme Launched by the Regina Board of Trade.

The Regina Board of Trade proposes to bring a large proportion of vacant land rapidly under cultivation by establishing Community Settlements throughout the country through an organization to which the management of the land shall be given. It is proposed that groups of families shall be organized, that each family shall receive an allotment of one hundred and sixty acres of land; that they shall settle in small villages and that they shall be located in such a way that while living closely together they will still be near their farms. This will mean organization on the part of the group for the purpose of both buying and selling; one of their number shall be selected by them for the purpose of doing such business and receiving such instructions as will enable the group to carry on the operations with the greatest efficiency and economy.

The Regina Board believes that the land will have to be bought on long terms of payment, carrying a moderate rate of interest.

The credit of the whole group would be back of every individual contract as this is the only way in which the necessary amount of funds could be made available for the purpose. The experience of Europe has shown that groups such as these can be given a reasonable amount of credit suitable for their needs with absolute safety. When the land in the hands of the Committee is sold, a bond will be given to the owner for the value of the land as agreed upon between the trustees and the owner on the terms of the sale as soon as the title is made clear. These bonds would have a permanent market value and would be looked upon with the same favor, as an investment, as bonds of a municipality or province, at least during normal conditions.

It may be necessary in the strenuous and uncertain conditions that prevail now that there might have to be some endorsement by a Government to give them immediate value, until investors realize their value as they are recognized in Europe.

It is absolutely necessary that, before permanent settlement can be obtained, some amount of credit shall be extended to the groups to enable them to procure, at the lowest possible price, the necessary equipment to carry on their operations. It is estimated by those who have given study to this matter that there are fifty thousand heads of families, who are trained farmers, available in Canada at the present time for settlement. One hundred and sixty acres of land to each of these would mean that there would be 8,000,000 acres of land immediately occupied and brought very quickly under cultivation.

A great many farm implements and facilities would be used by the group in common, one of the advantages of this system being that it would not be necessary for each individual to have a large amount of idle implements and equipment which would only be used for a short time. Another great advantage would be that the teams of horses or oxen could be worked together when the necessity arose, such for instance as in ploughing, and the members of the community not engaged in driving them could be employed in putting up the necessary buildings, fences and looking after the general work of the settlement. It is not contemplated however, that the lands or products should be held in common, each individual would have the benefit of his own industry and labor, each individual of the community would be competing with his neighbor for the highest efficiency in production and each community in turn would be competing with the other communities for supremacy.

THE WORLD'S UNIVERSAL CODE.

THE attention of INDUSTRIAL CANADA has been directed to a new telegraphic code which should prove of great value not only to commercial men but to all who have to make frequent use of cables. It is constructed on a novel and very ingenious principle and is remarkable alike for its simplicity and the economy which it enables the user to effect in his cable charges.

All that is necessary is to write out the message in ordinary language and hand it over to any clerk of ordinary ability, who will be able to code such messages at the rate of 25 words in 10 minutes or less. The decoding is equally easy.

It is claimed that a message of 65 words can be condensed to 5 words, terse and clear, without the slightest chance of a misunderstanding.

The conversational part of the code is applicable to any business, professional or private matter.

Samples of Condensation.

A great advantage is that any figure or fraction of a figure can be given from 1/32d. up to 9,999,999,999 with one-thirty-second rise; also any weight or any dimension. For instance, the figures 043107¾ can be coded in 8 letters. The sum of "£157 14s. 11d." or the sentence "$10.00 less 60, 5 and 2½," or the weight "long tons 15.13 cwt. 7 pounds" in 10 letters. Special tables have been attached for quotations which give any price from ½ cent up to $120.00 with a rise of half cent in 2 to 4 letters. For instance the sum of £29 3s. 2¾d. can be given in four letters as well as, for instance, "$71.83½." A discount table contains all usual discounts from 1/8% to 90.5 and 2½%.

By a serial system, which, in the opinion of a University Professor of Mathematics, is the "limit of condensation," 10 different lines from any invoice or order can be clearly repeated with full shipping instructions in one word, any further 10 lines by adding 6 more letters.

Special tables for mild and structural steel are contained in the code which enable the merchant or manufacturer to give the following specification in 9 letters:—"12 tons 13 cwt. round mild steel 11/16 inches, diameter 15 feet 9 inches long," or "74 unequal angles 6 x 4½ x 7/16 inches."

Boiling Down an Order.

As a remarkable proof of condensation we give here the following timber order actually given by an Auckland timber merchant to a western mill:—

60 000 ft. each	6 x 1 in.,	12 x 1 in.,	10 to 15 ft.
		12 x 2 in.,	16 to 32 ft.
50,000 ft. each	9 x 1 in.,	4 x 3 in.,	10 to 15 ft.
		9 x 2 in.,	16 to 32 ft.
40,000 ft.	3 x 2 in.,		10 to 15 ft.
30,000 ft. each	14 x 1 in.,	3 x 3 in.,	4 x 4 in., 10 to 15 ft.
	10 x 2 in.,	10 x 3 in.,	14 x 2 in., 14 x 3 in., 16 to 32 ft.
	10 x 10 in.,	12 x 10 in.,	14 x 10 in., 16 x 10 in.
	18 x 12 in.,	16 x 16 in.,	18 x 18 in., 20 x 20 in., 33 to 40 ft.
90,000 ft.	4 x 2 in.,		10 to 15 ft.
30,000 ft.	6 x 2 in.,		10 to 15 ft.

Merchantable, Oregon.

The whole of this order was condensed into 9 words.

A paper merchant can cable in two words, the following order:—

"Ship at once 250 reams azure wove writing 25 x 40 in., 40 pounds.

"Ship at once 50 reams blue laid double demy 22½ x 35 in., 46 pounds.

"Terms net cash on delivery of documents."

Similar tables, suitable for any kind of business can easily be made out by any intelligent clerk.

How Expense is Reduced.

To show the value of condensing cables, we were told by the compiler that a New Zealand hardware merchant had to cable for the price of a quantity of structural steel. The cost of the cable by any code in his possession would have amounted to £70. He hesitated to spend so much money on a dubious business. Ultimately use was made of the World's Universal Code, which brought the amount down to £17. When tenders were opened the merchant secured the contract, being just £35 below the next best tender.

The code contains further a list of over 5,000 geographical names, giving all ports and Lloyd's agents throughout the world, the names of all the principal banks of the world. (about 1,600), shipping companies (550), insurance companies (800), railways (2,200). Any of these can be clearly indicated by 3 letters, without fear of duplication.

The publisher of the code states that it has been adopted by the Government of Victoria, Australia, and is being used in Australasian commerce. Those interested will be put into communication with the publisher upon application to the Canadian Manufacturers Association, Toronto.

COMMODITY PRICES ARE EASIER.

The Labor Department's index number reviewing prices in October shows a tendency to a lower level. When the war broke out the number rose almost at once from 135.5 to 140.7. It has now eased back to 139.0, or nearly two points. Compared with a year ago, however, it is nearly five points higher. The October relapse is chiefly accounted for by declines under the headings, grains and fodders, animals and meats, and fruits and vegetables. Among miscellaneous foods, cream of tartar and glucose fell, but sugar, molasses and honey advanced. Silk and jute lowered the average for textiles. Metals, coke, linseed oil, hops and rubber also developed weakness. On the other hand, New Brunswick spruce, deals, glass, starch and newsprint were higher.

The above refers to wholesale prices, of which 272 are included in the review. Retail prices in the several Canadian cities followed pretty generally in the wake of wholesale. From the householders' standpoint the further advance of nearly one cent per pound in sugar was the most unfavorable incident of the month. On the other hand, potatoes were unusually low in Eastern Canada, and meats went down in several places. Bread went up in four cities. Flour went up in three and down in three. Butter was unusually steady, though it usually advances at this time of the year; the rise in September perhaps accounts for this. Milk came down in two places, which is unusual at this time of year. Rents have been falling pretty generally for some months past.

Only one new strike occurred in the whole of Canada in October, that of moulders at Owen Sound, but five remained unsettled from September.

BIG ORDERS FOR WIRE.

Great activity is in evidence at the Canadian steel mills in the manufacture of barb wire. Most of the plants with the necessary equipment are working to capacity in this line.

AUSTRALIAN IMPORTS.

The attention of manufacturers is directed to Report No. 564 of the Trade and Commerce Department, Ottawa, which contains a complete analysis of Australian imports by Mr. D. H. Ross, Canadian Trade Commissioner. Manufacturers who contemplate increasing their exports to Australia should apply to the Department for a copy.

SWEEPING CHANGES IN ONTARIO WORKMEN'S COMPENSATION SYSTEM.

Introduced by Order-in-Council. Changes become effective with the Act on January 1st, 1915.

AN Order-in-Council of the Ontario Government, issued just as INDUSTRIAL CANADA goes to press, makes wholesale changes in the Workmen's Compensation Act of Ontario. The text of the order follows:

THE WORKMEN'S COMPENSATION BOARD.

REGULATIONS 2 TO 50.

The Workmen's Compensation Board hereby makes the following Regulations respecting The Workmen's Compensation Act:—

2. Lumber yards (including the delivery of lumber) carried on in connection with saw mills, and the creosoting of timbers, are added to Class 1 of Schedule 1.

3. Manufacture of artificial limbs, cork articles, cork carpets and linoleum, and picture framing and cabinet work are added to Class 3 of Schedule 1.

4. Lumber yards (including the delivery of lumber) carried on in connection with planing mills or sash and door factories, and manufacture of matches and shade rollers are added to Class 4 of Schedule 1.

5. Cooperage, not including the making of staves or headings, is added to Class 4 of Schedule 1.

6. Boring and drilling, including sinking artesian wells (except when done by an employer coming under Class 13) and manufacture of calcium carbide, carborundum and alundum are added to Class 5 of Schedule 1 and removed from any other class in which they might otherwise respectively be.

7. Manufacture of sewer pipe, plaster blocks or plaster board, and manufacture of slate or roof tile are added to Class 6 of Schedule 1.

8. Classes 6 and 31 of Schedule 1 are united as Class 6.

9. Manufacture of shot is added to Class 8 of Schedule 1.

10. Manufacture of dry batteries, cameras, sporting goods, fire arms, wind mills, ivory articles, rubber stamps, pads or stencils is added to Class 10 of Schedule 1.

11. Machine shops not elsewhere included in Schedule 1 or Schedule 2, and the industry of carrying on a blacksmith shop, are added to Class 10 of Schedule 1.

12. Classes 9 and 11 of Schedule 1 are united as Class 11.

13. Manufacture, transmission and distribution of natural or artificial gas and operations connected therewith, the cutting, storing, handling and delivery of natural ice, as well as the handling and delivery of artificial ice, and the manufacture of wood alcohol and celluloid articles are added to and included in Class 13 of Schedule 1, and wood alcohol is withdrawn from any other class in which it might otherwise be.

14. Manufacture of fire-works, gunpowder, ammunition, nitroglycerine, dynamite, guncotton and other high explosives is constituted into sub-class (*a*) of Class 13.

15. Manufacture of methylated spirits is added to Class 15 of Schedule 1.

16. Manufacture of yeast, baking powder and mucilage is added to Class 16 of Schedule 1.

17. Operation of threshing machines, clover mills and ensilage cutters is added to Class 17 of Schedule 1.

18. Manufacture of fertilizer not incidental to any other industry is added to Class 18 of Schedule 1.

19. Manufacture of whips, trusses and imitation leather is added to Class 20 of Schedule 1.

20. Manufacture of salt and the manufacture of starch of all kinds are added to class 22 of Schedule 1 and are removed from any other class in which either of them might otherwise have been included.

21. Classes 21, 22 and 23 of Schedule 1 are united as Class 22.

22. Manufacture of tents, awnings and articles not otherwise specified made from fabrics or cordage; the erecting of awnings by the manufacturer; and the manufacture of asbestos goods, hair cloth and other hair goods are added to Class 26 of Schedule 1.

23. Classes 25 and 26 of Schedule 1 are united as Class 26.

24. Manufacture of feathers and artificial flowers is added to Class 27 of Schedule 1.

25. Manufacture of papier maché articles is added to Class 29 of Schedule 1.

26. Teaming and cartage, including the hauling for hire by means of any vehicle, howsoever drawn or propelled, of any commodity or material, and scavenging, street cleaning, and removal of snow or ice, are added to Class 30 of Schedule 1.

27. Bridge building, not included in Schedule 2, and the erection of windmills are added to Class 32 of Schedule 1 and excluded from any other class in Schedule 1 in which they might otherwise have been included.

28. Lathing, the installation of pipe organs, and house wrecking and house moving are added to Class 33 of Schedule 1.

29. Classes 33 and 34 of Schedule 1 are united as Class 33.

30. Gas and steam-fitting are added to Class 36 of Schedule 1.

31. The operation of freight or passenger elevators where no workman is specially employed therefor is withdrawn from Schedule 1, and, subject thereto, the operation of freight or passenger elevators in any industry included in any class in Schedule 1 is transferred from Class 36 to the class in which such industry is included, but the operation of freight or passenger elevators elsewhere than in such an industry shall remain and be in Class 36.

32. Maintenance and operation of a waterworks system is added to Class 37 of Schedule 1.

33. Deep excavation is withdrawn from Class 37 of Schedule 1 and excavation work for cellars, foundations and canals; and trenching, less than 6 feet deep, for gas pipes, water pipes or wire conduits; and all excavation work where the depth is more than 6 feet and the width is less than half the depth are added to Class 37.

34. Electric wiring of buildings and installation of lighting fixtures, construction or operation of an electric light system and construction or operation of power plants and electric light works, not included in Schedule 2, are added to Class 38 of Schedule 1.

35. Construction or operation of telephone lines and works for the purposes of the business of a telephone company or used or to be used in connection with its business, when constructed or operated by the company as mentioned in paragraph 4 of Schedule 2, except where such telephone lines or works are within the legislative authority of the Parliament of Canada, is removed from Schedule 2 and added to Class 38 of Schedule 1.

36. Classes 38 and 39 of Schedule 1 are united as Class 38.

37. Making or repairing of roads of all kinds not included in Schedule 2 is added to Class 41 of Schedule 1.

38. Manufacture of asphalt material and paving material is transferred from Class 6 to Class 41 of Schedule 1.

39. Classes 40 and 41 of Schedule 1 are united as **Class 41.**

40. Fishing, navigation, and operation of all kinds of vessels, stevedoring, operation of and work upon wharves, towing, operation of dry-docks and marine-wrecking, not included in Schedule 2, are added to Class 43 of Schedule 1; and the construction or operation of steam vessels and works for the purposes of the business of a navigation company or used or to be used in connection with its business when constructed or operated by the company as mentioned in paragraph 6 of Schedule 2, is removed from Schedule 2 and added to Class 43 of Schedule 1.

41. Classes 42, 43 and 44 of Schedule 1 are united as Class 43.

42. All industries, trades, businesses and occupations mentioned in section 73 of the Act and not otherwise classified and not included in Schedule 2 shall form a class to be known as Class 73.

43. Subject to any provision elsewhere contained respecting operation of elevators, each of the following industries is excluded from the operation of Part I, namely:—

(*a*) The business of florist or seedsman, seed-growing, gardening and horticulture.

(*b*) Hand laundries.

(*c*) The business of window-cleaning.

(*d*) Barber shops and shoe shine establishments.

(*e*) Manufacture of plaster statuary.

(*f*) Undertaking and funeral directing.

(*g*) Mail carrying.

(*h*) Educational, hospital and surgical work.

(*i*) Wholesale and retail mercantile business.

(*j*) Hotel-keeping and restaurant-keeping.

(*k*) Public garages, livery stables, auction and sales stables and conveyances of passengers or passengers and baggage by vehicle.

(*l*) Taxidermy.

(*m*) Junk dealing.

(*n*) The business of an architect.

(*o*) Excavation other than as specified in Regulation 33.

(*p*) Every industry carried on as part of, and in immediate connection with, and for the purpose of an exclusively retail business dealing in men's or women's clothing, whitewear, shirts, collars, corsets, hats, caps, furs or robes.

44. Each of the following industries when carried on as part of, or in immediate connection with, and for the purpose of an exclusively retail business is excluded from the operation of Part I, namely:—

(*a*) Watch, clock and jewellery-making and repairing.

(*b*) Boot and shoe making and repairing.

(*c*) Harness-making and repairing.

(*d*) The business of an optician.

(*e*) Tinsmithing and tinsmith repairing in shop only.

(*f*) Pipe cutting.

(*g*) Paper cutting.

(*h*) Drug manufacturing.

(*i*) Sausage manufacturing.

(*j*) Meat cutting.

(*k*) Coffee grinding

and like operations or work.

45. Where less than six workmen are usually employed therein, each of the following industries is withdrawn from the class in Schedule 1 in which it would otherwise be included, namely:—

(*a*) The cutting or splitting of firewood.

(*b*) The manufacture of cheese or butter and the operation of creameries or dairies.

(*c*) The construction or operation of telephone lines or works.

(*d*) The manufacture of artificial limbs.

(*e*) Power laundries, dyeing, cleaning or bleaching establishments.

(*f*) Mining (including prospecting and development work) except in producing mines where the workmen are in the employ of the owner, lessee or recorded holder thereof.

(*g*) Operation of threshing-machines, clover mills and ensilage cutters.

(*h*) Scavenging, street cleaning and removal of snow or ice.

(*i*) Manufacture of feathers and artificial flowers.

(*j*) Confectioners.

46. Where less than four workmen are usually employed therein, each of the following industries, when not incidental to an industry under Schedule 1, is withdrawn from the class in Schedule 1 in which it would otherwise be included, namely:—

(*a*) Machine shops.

(*b*) Repair shops.

(*c*) Tinsmith shops.

(*d*) Carrying on a blacksmith shop.

(*e*) Cabinet work.

(*f*) Upholstering.

(*g*) Picture-framing.

(*h*) Maintenance or operation of a waterworks system.

(*i*) Manufacture of rubber stamps, pads or stencils.

47. The interpretation of words and phrases provided for in section 2 of The Workmen's Compensation Act shall apply to these and all other regulations of The Workmen's Compensation Board.

48. Except where otherwise specifically provided, every industry which, if carried on by an employer carrying on no other industry, would not be under the operation of Part I, is excluded from the operation of Part I where it is carried on by an employer who is also carrying on an industry or industries which is or are under the operation of Part I.

49. Subject to any other Regulation of the Board, every undertaking which consists of work or service (for example, the delivery of goods), for which no direct charge is made and which is incidental to an industry under Part I carried on by the employer who performs or renders such work or service, is added to or included in the class in which such industry is included; and when such industry is incidental to an industry not under Part I it is excluded from the operation of Part I.

50. Subject to any other Regulation of the Board, every undertaking which consists of work or service for which a direct charge is made and which is connected with but not a part of an industry (whether such industry is under Part I

or not) carried on by the employer who performs or renders such work or service, and which work or service if carried on separately would be an industry under the operation of Part I, is added to or included in the class of industries in which such undertaking if carried on by itself would be included

Passed the 26th day of November, 1914.

Approved by the Lieutenant-Governor in Council the 26th day of November, 1914.

CANADIAN GOODS FOR TORONTO TECHNICAL SCHOOL.

"Made in Canada" was the motto adopted by the advisory industrial committee of the Board of Education, Toronto. The question was raised by the labor representatives in the committee, who pointed out that the doors and wooden framework for various parts of the Central Technical High School could be procured in Canada at a slight percentage over those imported from the United States. It was decided to pay the difference to contractors, so that made in Canada doors exclusively could be used and home labor benefited.

KITCHENER AIDS TOBACCO BUSINESS.

With a view of stimulating the tobacco trade in Canada, Rhodesia and Nyassaland, Lord Kitchener has ordered the modification of the war office tobacco specification, so as to include products of these three Dominions, provided the quality proves satisfactory.

BIG IRON FENCE ORDER.

A large order for ornamental iron fence has been placed with the Page Wire Fence Company at Walkerville. About 3,300 lineal feet will be required to fence in the ten-acre estate of E. Chandler Walker.

The total cost of this fence, not including the erection cost, will be in the neighborhood of $7,500.

General Manager Church, of the Page Company, reports an unusually large amount of ornamental iron fence work running through the shops at this time. In fact, fence business for the past year has been considerably better than it was during 1913, with every indication of a substantial increase in the coming year.

NO BUSINESS FOR GERMAN AGENTS.

"Evidence has come before the Department of Trade and Commerce to the effect that German shipping and forwarding agents, to compensate themselves for cessation of trade in their home centres, have transferred their offices to London and points in Canada. In this way they are attempting to retain their business connections in competition with British and other firms until peace enables them to re-establish themselves in Germany. In order to do this they offer rates that preclude British firms from doing business on a reasonable basis. While it would be difficult to directly interfere with such practices as here indicated, it is nevertheless desirable for Canadians to discourage hostile activity of this kind by assuring themselves of the standing of the firms with which they may have occasion to transact business."

HON. CLIFFORD SIFTON ADDRESSES TORONTO MANUFACTURERS.

IN a brilliant address, delivered by the Hon. Clifford Sifton to the Toronto Branch of the C.M.A, on November 26th, a compact policy for Canada's industrial future was defined.

"It seems to me," said Mr. Sifton, "that prudence will always require that the Canadian manufacturer should not place himself unduly in the hands of his foreign trade or endanger his position by disturbance of trade always likely to take place abroad. Our main object in Canada ought to be in connection with the manufacturing industry to manufacture for our home market. In that market I believe in moderate protection. I do not believe in excessive protection. I do not believe in protection that enables you to unfairly exploit the Canadian market while hunting desperately for markets abroad. I do not believe in protection unfair to the consumer; but I believe in a protection which is sufficient to enable the Canadian manufacturer by exercising the greatest amount of diligence and capacity to hold his market against the foreign competitor. That is my view of a reasonable protection. I am in favor of it against any country whatever, including Great Britain. I do not take any stock at all that our tariff policy ought to be changed, that our views as to manufacturing prosperity ought to be changed because we are dealing with Great Britain, and I think I am just as loyal as anybody. I believe in the British preference, but I believe the British preference should be framed as a help to the British manufacturer against the foreign manufacturer, and not against the Canadian manufacturer.

Case of Great Exporter.

"Great Britain, Germany and the United States might stand on an even keel as three manufacturing nations on high tariffs, but there is one thing beyond the possibility of a doubt, that no high tariff country can build the ships and carry the trade for the rest of the world. You cannot be a clearing house for the world if you have a high tariff. Canada's position, however, is entirely different. We have illimitable natural resources —agricultural, mining, lumbering and fisheries—and have, therefore, the advantage of having the means within our own limits of sustaining a great, vigorous and powerful population. This ought to be our policy—to manufacture for our own home population, which is capable of so great expansion."

Protection Necessary for Agriculture.

Mr. Sifton stated his belief that farmers needed protection, as well as manufacturers, illustrating his statement by a prophecy of the fate of the western grain growers if they had secured free wheat.

In conclusion, he summarized under the following six heads the lines on which he thought Canada should proceed in order to attain the greatest development:

1. Substitute Canadian goods for those now imported.
2. Technical education.
3. Scientific development of agriculture.
4. Completion of the settlement of the West.
5. Organization of systems of distributing farm products.
6. The prevention of slums in the cities.

Mr. R. J. Younge, of Montreal, formerly Secretary of the C.M.A., emphasized the necessity of restoring Canada's trade balance.

Mr. George Brigden, Chairman of the Toronto Branch, presided.

WHEN all is said and done, no one has heard the last word on the Power question until he has heard the facts for Hydro —the cheapest and best power any manufacturer can use.

Hydro Engineers are capable and their services are free. They investigate and advise. Your present power plant, its costs, its usefulness thoroughly searched and reported on. Much for you to learn, maybe. Nothing to pay.

Expert advice on your lighting and money-saving recommendations, too.

We are at the other end of your telephone wire.

The Toronto Hydro-Electric System

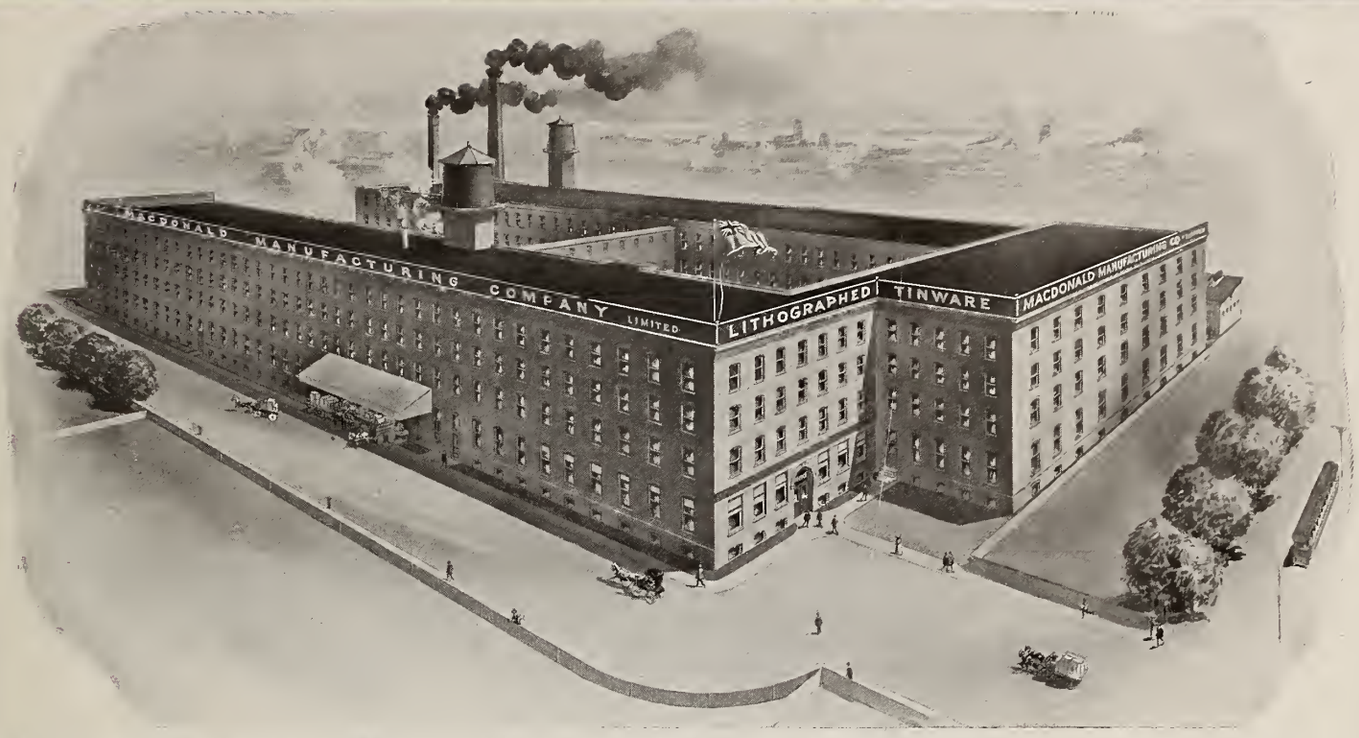
226 YONGE STREET PHONE ADEL. 2120

FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of October, 1914.

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

C.R.C.	R.R. No.	Effective.	Description.
Canadian Pacific Railway.			
Sup. 4 W 1963	Sup. 4 W 3215	Oct. 1-14	Class and commodity rates between Port Arthur, Fort William, Westfort and points west.
Sup. 7 W 1827	Sup. 7 W 2907	Nov. 1-14.	Commodities C.P., C.N. and G.T.P. stations to points in U.S.
Sup. 26 W 1806	Sup. 26 W 2866	Oct. 1-14	Lumber, shingles, etc., Coast and interior mills to stations on C.P., C.N. and G.T.P. railways.
Sup. 5 W 1953	Sup. 5 W 3215	Oct. 5-14	Class and commodity rates, Port Arthur, Fort William and Westfort to points west.
Sup. 1 W 1959	Sup. 1 W 3230	Oct. 1-14	Distributing class rates from wholesale centres to stations on western lines.
Sup. 7 W 1885	Sup. 7 W 3045	Various dates.	Commodities C.P. and C.N. to Atlantic seaboard for export.
Sup. 18 W 1739	Sup. 18 W 2697	Oct. 6-14	Lumber, shingles, etc., between B.C. coast mills and points in B.C.
Sup. 4 W 1973	Sup. 4 W 3240	Oct. 8-14	Class and commodity rates between Vancouver, Victoria, New Westminster and points on C.P.
Sup. 8 W 1969	Sup. 8 W 3235	Various dates.	Commodities between C.P. Western line stations.
Sup. 15 W 1598	Sup. 15 W 2416	Oct. 8-14	Lumber, shingles, etc., Winnipeg, Port Arthur, etc., to stations on C.P., C.N. and G.T..P.
Sup. 9 W 1969	Sup. 9 W 3235	Various dates.	Commodities between C.P. western line stations.
Sup. 2 W 1959	Sup. 2 W 3230	Oct. 10-14	Distributing class rates wholesale centres to stations on western lines.
E 2869 cancels E 1699	E 2498 cancels E 1286	Oct. 27-14	C. P. stations and connecting lines to St. Johns, N.F. and points on Reid-Newfoundland Ry. Reduction. Advance.
Sup. 1 E 2844	Sup. 1 E 2471	Oct. 1-14	Commodities, Eastern Canada to points in Northwest. Lake and Rail. Reduction.
Sup. 1 E 2843	Sup. 1 E 2470	Oct. 1-14	Commodities, Eastern Canada to points in Northwest. All rail. Reduction.
Sup. 2 E 2842	Sup. 2 E 2469	Oct. 6-14	Classes, Eastern Canada to points in Northwest. Lake and Rail. Reduction.
C.R.C.	R.R. No.	Effective.	Description.
Canadian Pacific Railway.			
Sup. 11 E 2646	Sup. 11 E 2262	Oct. 27-14	Switching and Interswitching at C. P. stations. Advance.
Sup. 31 E 1593	Sup. 31 E 1180	Oct. 30-14	Paper C.L. stations in Canada to points in U. S. Reduction.
Sup. 28 E 2529	Sup. 28 E 2133	Nov. 2-14	Commodities, C.P. stations to points in U.S. Advance. Reduction.
Sup. 15 E 2643	Sup. 15 E 2259	Oct. 6-14	Pig Iron, C.L., between C.P. stations. Reduction.
Sup. 14 W 1856	Sup. 14 W 2972	Various dates.	Commodities from Oriental ports to overland stations in Eastern Canada. New rates. Advance.
Sup. 8 W 1973	Sup. 8 W 3240	Various dates.	Class and commodity rates, Vancouver, Victoria, Westminster, to points on C. P. Western lines. Re-issue. New rates.
Sup. 5 W 1959	Sup. 5 W 3230	Nov. 1-14	Distributing class rates, Wholesale centres to stations on C. P. Western lines. Re-issue. New rates.
Sup. 9 W 1963	Sup. 9 W 3215	Nov. 1-14	Class and commodity rates between Port Arthur, Fort William, Westfort, and stations west. Re-issue. New rates.
Sup. 8 E 2303	Sup. 8 E 1903	Nov. 22-14	Class rates, C. P. stations to Detroit and stations on C. H. & D., P.M., and Wab. railways in U.S. Advance.
Sup. 8 E 2491	Sup. 8 E 2091	Nov. 23-14	Commodities, C. P. stations to Atlantic seaboard for export. Advance. Reduction.
E 2880 cancels E 1806	E 2510 cancels E 1396	Nov. 23-14	Lumber and forest products, C. P. stations to Buffalo, Tonowanda, etc. Advance.
Sup. 16 E 1697	Sup. 16 E 1284	Nov. 23-14	Class rates, C. P. stations to points in U.S. Advance.
E 2879 cancels E 2768	E 2509 cancels E 2380	Nov. 24-14	Class rates, C. P. stations to points in U.S. Advance.
Sup. 7 E 1616	Sup. 7 E 1203	Dec. 1-14	Class rates, C. P. stations to points in New England and New York State. Advance. Reduction.
Sup. 13 E 2560	Sup. 13 E 2167	Dec. 1-14	Import merchandise, St. John and West St. John to C. P. stations. Advance.
Sup. 51 E 2713	Sup. 51 E 2330	Oct. 28-14	Commodities between C. P. stations. Reduction.
Pennsylvania Railroad.			
GO 853 cancels GO 798	....	Nov. 16-14	Pig iron and iron and steel, Erie, Pa., to Canadian points.
Go 852 cancels GO 279	....	Nov. 16-14	Rough iron forgings, Titusville to points in Canada.
GO 851 cancels T.T. 22	....	Nov. 16-14	Iron and steel articles, Titusville to Welland, Ont.



MACDONALD MANUFACTURING CO., LIMITED, TORONTO

We Specialize on Cans or Boxes required for Customer's Exclusive Use
Practically Nothing Else made in our Entire Plant
This Ensures Undivided Attention to your Particular Order

PLAIN OR DECORATED TIN BOXES AND SIGNS

Write to us for catalogue and further information

HOPE STEEL SASH



HOPE STEEL SASH is adaptable to every type of Industrial Building. Its great strength, economy and permanence fully meet the requirements of any architect or builder for this class of work.

The use of HOPE SASH means not only economy, but by the admission of more daylight and better ventilation it increases efficiency and means larger output for the manufacturer. HOPE SASH requires no upkeep and the first cost is practically the only cost. The fireproof qualities of HOPE SASH reduce insurance rates, and its durability is evidenced in structures in which it has been in use for a great number of years.

HENRY HOPE & SONS OF CANADA, LIMITED

43-45 KING STREET WEST, TORONTO

AGENTS:

Kilvert Bros., Saskatoon, Sask.
W. N. O'Neill & Co., Vancouver, B.C.
Gandy & Allison, St. John, N.B.
Wm. W. Cary & Co., Calgary, Alta.
W. T. Grose & Co, Winnipeg
E. F. Stevens, Halifax
Lyons Fuel Co., Steelton, Ont.
Peart Bros., Regina
Walker & Barnes, Edmonton, Alta.
David McGill, Montreal

C.R.C.	R.R. No.	Effective.	Description.
Grand Trunk Railway.			
Sup. 20 E 1011	Sup. 20 C.J. 25	Oct. 14-14	Iron Commodities from Welland, Port Robinson and St. Catharines, Ont., to points on G.T. and connecting lines. Advance. Reduction.
Sup. 22 E 2457	Sup. 22 S 86	Oct. 21-14	Interswitching at G.T. stations. Reduction.
Sup. 60 E 2855	Sup. 60 C.Y. 31	Sept. 24-14	Wire Rods, C.L., Hamilton to various points. Reduction.
Sup. 6 E 2475	Sup. 6 J. 6	Oct. 24-14	Class rates, stations Dorval and West to points in Maritime Provinces. Advance. Reduction.
Sup. 2 E 993	Sup. 2 C.T. 24	Oct. 26-14	Metallic Shingles, Galt, Oshawa, Preston, Toronto to points on Intercolonial Ry. Advance. Reduction.
Sup. 5 E 524	Sup. 5 C.D. 3	Oct. 28-14	Metallic Shingles and Siding, C.L., Galt, Oshawa, Preston and Toronto to G.T. stations and points in connecting lines. Advance. Reduction.
Sup. 3 E 2867	Sup. 3 C.I. 152	Sept. 30-14	Iron Pipe, Pipe Fittings, structural iron or steel, etc. Sarnia to points on G.T. and connecting lines. Reduction.
Sup. 62 E 2855	Sup. 62 C.Y. 31	Oct. 5-14	Sulphur C.L., Montreal Wharf to Iroquois Falls, Ont. 23½ cents per 100 lbs. Reduction.
Sup. 57 E 1240	Sup. 57 E. 12	Oct. 2-14	Class and Commodity rates. G.T. stations to Montreal and Quebec for Export. Reduction.
Sup. 21 E 1011	Sup. 21 C.I. 25	Oct. 27-14	Iron Commodities. Welland, Port Robinson and St. Catharines to stations Montreal and West. Advance.
Sup. 23 E 2457	Sup. 23 S. 86	Nov. 4-14	Interswitching at G.T. stations. Advance. Reductions.
Sup. 24 E 2457	Sup. 24 S 86	Nov. 15-14	Interswitching at G. T. stations. Advance. Reduction.
Sup. 15 E 133	Sup. 15 G.B.F. 4	Nov. 16-14	Class and commodity rates to Duluth, St. Paul, etc. Advance.
Sup. 25 E 1119	Sup. 25 C.F. 71	Nov. 16-14	Woodashes C.L. stations in Canada to points in U.S. Advance.
Sup. 10 E 1544	Sup. 10 V. 7	Nov. 16-14	Class rates to U. S. points. Advance.
Sup. 12 E 2664	Sup. 12 B. 24	Nov. 16-14	Class rates between Buffalo, Black Rock, Suspension Bridge and points in Canada. Advance. Reduction.
Sup. 67 E 2855	Sup. 67 C.Y. 31	Oct. 21-14	Agricultural implements C.L. Paris, Ont., to Montreal. Reduction.
Sup. 70 E 2855	Sup. 70 C.Y. 31	Oct. 29-14	Sal. soda. c.l., Toronto to Montreal, 17c. per 100 lbs. Reduction.
Grand Trunk Railway.			
W 362 cancels W 222	303 B cancels 303	Nov. 16-14	Pig iron and iron and steel articles, G. T. stations in U. S. to points in Canada. Advance.
W 354 cancels W 282	202 D cancels 202 B	Nov. 16-14	Class and commodity rates, G. T. stations in U. S. to points in Canada. Advance.
Michigan Central Railroad.			
Sup. 16 2049	Sup. 16 9353	Dec. 1-14	Commodities between M. C. stations in Canada and to connecting lines. Advance.
Grand Trunk Pacific Railway.			
Sup. 3 23	Sup. 3 2	Oct. 5-14	Class and Commodity rates between Westfort and G.T.P. stations. Reduction.
Sup. 21 A 264	Sup. 21 C.D. 266	Oct. 1-14	Commodities G.T.P. stations to points in Eastern Canada. Reduction.

Canadian manufacturers who wish to test the British market for war needs, and also for future general supply, should communicate with C. D. Wreyford, 85 King St. West, who will be in England during January and will be prepared to make enquiries and take orders on commission featuring army supplies, boots, etc. Write up to Dec. 9th, 85 King St. West, after that date 43 Queen Anne St., London W, Eng.

SEVENTEEN CARLOADS OF

Northern Electric

HIGH-TENSION LEAD COVERED PAPER INSULATED

POWER CABLES

shipped on a single order.

Big business gravitates to those who can do big things *efficiently*.

That's why the largest users of wires and cables place their orders with Northern Electric Company, Limited.

It will pay you to place your orders with the Company that has *earned* the confidence of Central Station men and prominent engineers throughout the whole Dominion.

Northern Electric Company
LIMITED

MONTREAL HALIFAX TORONTO
WINNIPEG REGINA CALGARY
EDMONTON VANCOUVER VICTORIA

"MADE IN CANADA"

This Slogan

Is Going to be an Important Influencing Factor in Canadian Business of the Future

The Manufacturer First on the Spot

Is Going to Have the Best Chance at Canada's Market of

Ten Million People

Secure a Location

in the

Toronto Harbor Industrial District

and Stamp Your Output

"MADE IN CANADA"

Lead the Attack on Canada's Markets

AND LET OTHERS DO THE FOLLOWING

Three Transcontinental Railways
Free Sidings Free Interswitching
Electric Power at Cost

The Toronto Harbor Commissioners

50 Bay Street ALEX. C. LEWIS (Secretary) Toronto, Canada

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

366. **Agencies.**—A Glasgow firm which claims a connection with engineers, ship-builders, ship chandlers, and general hardware merchants would be glad to represent Canadian manufacturers upon a commission basis.

367. **Bronze Powder**—An important London tea company asks to be placed in correspondence with Canadian manufacturers of bronze powders suitable for printing labels.

368. **Printing Paper.**—A Nottingham firm is open to receive quotations and samples of printing paper.

369. **Wood Pulp.**—A London firm using thousands of tons of mechanical and sulphite pulp annually is open to receive offers c.i.f. London.

370. **Pulp Wood.**—A West Hartlepool firm inquires for pulp wood in quantities from 4,000 to 5,000 English fathoms of 216 cubic feet, 4-inch top and upwards, of white wood free of bark and bast.

371. **Wood Pulp.**—A West Hartlepool firm inquires for quotations on sulphite, soda and mechanical pulps for 500 tons each of the former two, and 100 tons of the latter.

372. **Matchwood.**—A Lancashirs firm of matchmakers and merchants wishes to get in touch with Canadian exporters of cotton wood or aspen, about 12-foot lengths and 20 inches in diameter.

373. **News Print.**—A Cape Town Commission house with connections throughout South Africa requests immediate correspondence with a view of selling Canadian news print.

374. **Canadian Doors.**—A London correspondent stated to have a large demand for Canadian doors, also red pine sawn timber, and pit props, wishes to get into touch with shippers in the Dominion.

375. **Flake and Powder Graphite.**—A North of England firm desires to import supplies of flake and powder graphite from Canada, and asks for names of producers.

376. **Wire and Wire Nails.**—A firm of wholesale builders' ironmongers in the south of England makes inquiries for names of Canadian makers of wire and wire nails.

377. **Match Splints.**—A Liverpool firm of timber merchants reports a demand for match splints and asks to be placed in touch with Canadian manufacturers of same.

378. **Bronze Powders and Gold Leaf.**—A Lancashire firm wishes to obtain the agencies of Canadian manufacturers of bronze powders and gold leaf.

379. **Caustic Potash or Pearl Ash.**—A manufacturing company in Liverpool seeks supplies of caustic potash or pearl ash and invites offers from Canadian manufacturers and shippers.

380. **Split-wood Pulleys.**—A London firm who seeks large supplies of split-wood pulleys for machinery transmission invites offers from Canadian manufacturers.

381. **Frames for Hammock Chairs.**—A London manufacturing company wishes to get into touch with Canadian manufacturers who can supply frames for hammock chairs. They would contract for large quantities, and upon receipt of samples and prices, are prepared to give an order for 5,000 for delivery in January.

382. **Aluminum Powders.**—An importing firm in Manchester wishes to get in touch with Canadian exporters of aluminum powders, ordinary quality and enamel; also a pure quality which will not show black on the paper after printing.

383. **Gold Paper.**—An importing firm in Manchester wishes to get in touch with Canadian exporters of gold paper, plain and protected, about 300 reams a year.

384. **Aluminum Leaf.**—An importing firm in Manchester wishes to get in touch with Canadian exporters of imitation leaf, about 200,000 leaves a month.

385. **Schlag Metal.**—An importing firm in Manchester wishes to get in touch with Canadian exporters of schlag metal in boxes of about 10,000 leaves. About fifty boxes a month.

386. **Bundle Metal.**—An importing firm in Manchester wishes to get in touch with Canadian exporters of bundle metal of different sizes, from 9 x 10 to 13 x 13 c.m., and qualities from No. 1½ to 3, about 100 bundles a month.

387. **Wire Nails.**—A Manchester firm of nail manufacturers and importers wishes to get in touch with Canadian exporters of wire nails.

388. **Screws.**—A Manchester firm of nail manufacturers and importers wishes to get in touch with Canadian exporters of screws.

389. **Bolts and Nuts.**—A Manchester firm of nail manufacturers and importers wishes to get in touch with Canadian exporters of cold rolled hoop iron.

390. **Wood Pulp.**—A correspondent in Spain reports a demand in that country for Canadian wood pulp in consequence of the suspension of Swedish supplies.

391. **Hardware.**—A Glasgow importer and commission agent is desirous of either purchasing or representing Canadian firms with goods to offer suitable for the hardware trade.

392. **Cooperage Stock.**—A Cornish firm of china clay proprietors wants to buy slack cooperage stock c.i.f. Fowey. They can take about 1,000 St. Petersburg standards, if quality and price are right, of the following dimensions: 70 per cent. 41½ x 9-16 x 2½ to 5 in. wide; 7 per cent. 41½ x 9-16 x 5½ to 6 in. wide; 20 per cent. 27 in. x ¾ x 3 to 7 in. wide. Send samples and prices.

393. **Barbed Wire.**—A South African manufacturing firm is prepared to take up agency or purchase direct, barbed wire from Canada if quotations are satisfactory. Immediate correspondence requested.

394. **Household Utensils, Iron, Enamelware and Woodenware.**—A Birmingham firm is open to represent manufacturers of household utensils—iron, enamelware and woodenware.

395. **Hardware Specialties.**—A Birmingham agent wishes to get into touch with Canadian manufacturers of hardware specialties. He has represented German firms for fifteen years.

396. **Calcium Carbide.**—A London firm desires the addresses of Canadian manufacturers of carbide of calcium for shipment to Australia.

397. **Engineering Specialties.**—A London firm of engineers, claiming a good connection among contractors, builders and merchant houses, would be glad to hear from Canadian manufacturers of engineering specialties, tools and articles associated with the building trades, who seek an export connection.

398. **Washboards, Clothes Pegs.**—A Glasgow firm of manufacturers' agents desires to make connections with Canadian manufacturers of washboards and clothes pegs.

399. **Pulp.**—A large Japanese importing firm wishes to get in touch with manufacturers and exporters of Canadian pulp, and to receive samples and quotations.

400. **Resin.**—A large Japanese importing firm wishes to get in touch with manufacturers and exporters of resin, and to receive samples and quotations.

401. **Starch.**—A large Japanese importing firm wishes to get in touch with manufacturers and exporters of starch, and to receive samples and quotations.

NEW MANUFACTURING COMPANIES.

The following companies have been recently incorporated in Canada for manufacturing purposes:—

Montreal, Que., The Blashill Wire Machinery Co., Ltd.	$48,000
Toronto, Ont., Superior Tubes and Accessories, Ltd...	300,000
Malbaie, Que., Nairns' Falls Power & Pulp Co., Ltd....	100,000
Montreal, Que., Chaleur Pulp & Lumber Co., Ltd.	75,000
Montreal, Que., Canadian Tar Products Co., Ltd.....	500,000
Montreal, Que., Radnor Water Co., Ltd.	100,000
St. Catharines, Ont., The Marathon Tire & Rubber Co., Ltd.	400,000
Toronto, Ont., Canadian Link-Belt Co., Ltd.	25,000
Toronto, Ont., Flexilac Paint Co., Ltd.	50,000
Wellington Village, Ont., West Lake Brick & Products Co., Ltd.	50,000
St. Catharines, Ont., St. Catharines Silk Mills, Ltd....	100,000
Winnipeg, Man., Canadian Electric Shoe Shining Machine Co., Ltd.	100,000
Summerside, P.E.I., The Canada Auto-Pneumatic Pump and Machinery Co., Ltd.	35,000
Toronto, Ont., Provincial Novelty Co., Ltd.....	40,000
Toronto, Ont., York Specialty Co., Ltd.	40,000
Toronto, Ont., Rubberset Co., Ltd.	40,000
Guelph, Ont., The Royal City Match Co., Ltd.	100,000
Port Arthur, Ont., Newaygo Co., Ltd.	200,000
Toronto, Ont., Copeland Medicine Co., Ltd.	80,000
Bridgeburg, Ont., Central Casket Co., Ltd.	40,000
Toronto, Ont., Campbell's Whitewear Co., Ltd.	40,000
Essex, Ont., Essex Motorcycle & Machine Co., Ltd....	100,000
Hamilton, Ont., The Proctor & Gamble Mfg. Co.	100,000

BAWDEN PUMPS

For All Purposes



The pumps backed by a grand reputation and the finest installations in Canada.

BAWDEN BASKET STRAINERS AND PIPE FLANGES

BAWDEN MACHINE CO., Limited
133 STERLING ROAD, TORONTO, CANADA

Your Men will Appreciate

Reece's Screw Plate

because, although fully adjustable it has all the advantages of a solid die. It is so made that cutting cross threads is an impossibility. Dies can be reversed in the collet for use in a lathe or other machine.

Invest in just one sample and test it out for yourselves.

Butterfield & Co., Inc.

Rock Island, P.Q. Derby Line, Vt.



To Manufacturers

How to take advantage of the "Made-in-Canada" Campaign

NEVER before in Canada has there been a movement so heartily approved and supported by the Press, the Trade and, above all, by the Consumer as that in favor of buying "Made-in-Canada" goods.

But this sentiment will often fail to result in definite or continued action unless the Consumer is informed as to what lines are "Made-in-Canada."

Manufacturers cannot expect the Consumer to ask for "Made-in-Canada" goods of which they have never heard. The Retailer cannot be expected to continuously tell the story for the Manufacturer.

Now is the time for the Canadian Manufacturer to tell the Consumer about the article he makes, and to show that his Canadian-made goods are as good or better value than imported and thus take full advantage of the general disposition to favor "Made-in-Canada" products.

The "Made-in-Canada" Campaign is being handled by our organization. We can tell *you* how best to tie up *your* advertising with the general campaign and share in its benefits.

We are the oldest and by far the largest Advertising Agency in Canada and our staff, of nearly one hundred people, is complete in every Department.

We have already shown several Manufacturers how to take advantage of the present situation, and we are in a position to advise *you* as to the best method of advertising and marketing *your* product.

On request we will be glad to make a study of your particular needs and to submit complete plans and estimates.

Address nearest office.

A. McKim Limited

ADVERTISING AGENCY

MONTREAL
Lake of the Woods Building

TORONTO
103 Bay St.

WINNIPEG
Union Bank Building

LONDON, ENG.
4 and 5 Norfolk St., W.C.

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Calgary, Alta.

The Western Canada Cordage Company, capitalized at a million dollars, with sufficient capacity to supply western farmers with 12,000,000 pounds of binder twine per year, will begin building operations at Calgary.

The Western Canada Cordage Company will erect four buildings for warehouse and office accommodation.

Edmonton, Alta.

Plans have been drawn and operations will start immediately for the construction of engine shed and machine shop, estimated to cost $10,000, for the Alberta & Great Waterways Railway Company.

The Edmonton, Dunvegan & B. C. Railway have had plans drawn and work will start at once on the construction of a $20,000 sawmill near St. Albert Trail.

Lethbridge, Alta.

A soap factory has opened here under the management of J. O. Jones.

Medicine Hat, Alta.

The Manager of the Linseed Oil Company mill, which was burned recently, states that the work of rebuilding has started already and the new plant will be ready for Christmas.

Redcliff, Alta.

The Redcliff Knitting Mills, of Redcliff, Alta., organized by Dr. Bonnar, is to be added to the list of working industries of Redcliff early next year. The knitting mills will commence work at that time on a large order of woolen socks for the British Government. Arrangements have been made with the town for a water supply and gas extensions. Mr. Bonnar has been successful in making financial arrangements which will enable him to proceed with the installation of the necessary machinery.

BRITISH COLUMBIA.

Compalix, B.C.

The mills of the Forest Mills Co. at Compalix, B.C., were destroyed by fire on November 7th, with a loss of about $200,000, mainly covered by insurance. The company state the mill will be rebuilt as soon as possible.

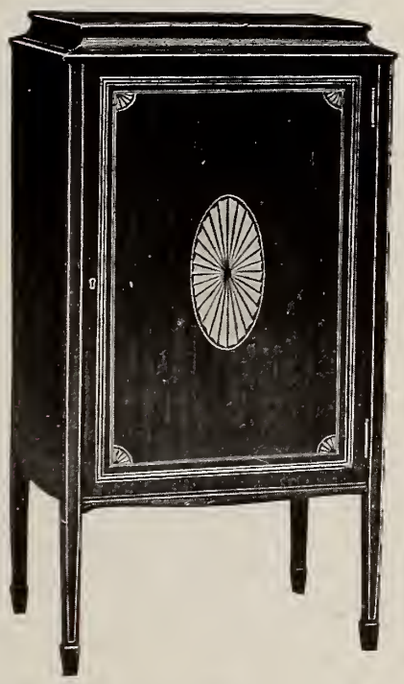
Christmas Gift Suggestions



No. 1021

WRITING Table, in mahogany and Circassian walnut, top 20 x 34 inches. Fitted with envelope, pen and paper racks. Has three drawers, brass trimmings, antique finish, centre drawer supplied with strong lock and key. Suitable for bedroom or living room. This is a gift such as any woman would be more than glad to receive. It is good looking, useful, substantial, and is constantly available for service. The price is quite reasonable, too.

SHOP MARK



No. 846

SHERATON Music Cabinet, 16 x 22, an exceptionally good example of the style of this famous old designer. With simple, straight lines and slight curves, relieved of any tendency to severity by artistic inlay in rare, contrasting woods. Cabinet is fitted with mahogany shelves and lock. It is dustproof, takes up comparatively little room, and can be used for safekeeping of Victrola records as well as for ordinary sheet music.

MADE IN CANADA



MADE IN CANADA

No. 800

TABOURETTE 14 x 14 top, in solid mahogany, finished in contrasting shades and inlaid. What woman hasn't often longed for something like this to hold a favorite plant, or fern, or bowl of flowers or an artistic piece of sculpture? Its use will add a finishing touch to any room. Equally available for decoration of window or holding knick-knacks in corner.

As arranged now,

our gift collection is an interesting exhibit of such articles as Work Tables, Writing Desks, Music Cabinets, Sewing Tables, Curates, Tabourettes, Tea Tables, as well as Wardrobe Chiffoniers, or "Highboys," Library Tables and Bookcases, etc., for men's use.

Most noticeable of all, perhaps, is the entire absence of that "turned-out-by-the-dozen" look which so often depreciates a gift in the eyes of the recipient. On the contrary, they are individually beautiful, artistic and useful articles that really mean something, and whose presence will contribute something definite to the beauty and comfort of the home.

Before making up your list, it might be well to take a trip through our gift department. Should you not be able to do this at your local dealer's, we will send it to you in the form of a handy

PORTFOLIO OF CHRISTMAS SUGGESTIONS

if you will merely say you are interested. "Send me full particulars of your gift furniture," will bring full particulars with name of nearest dealer.



No. 840

Louis XVI Sewing Table

HAS two roomy drawers and two folding leaves. Made in solid mahogany, plain. Light, graceful and strong, it admirably expresses the spirit of the 18th century. A woman who saw such a table at Versailles afterwards remarked that the palace didn't seem very comfortable until she saw the sewing table which the beautiful, but ill-fated Marie Antoinette had used.

TORONTO FURNITURE CO., LIMITED

163-187 Dufferin Street
TORONTO



No. 842

SHERATON Top-tilting Table, 23 x 28, inlaid. One of our "six best sellers." Solid mahogany, in natural finish, beautifully inlaid with rare woods. Must be seen to be really appreciated.

Coquitlam, B.C.

The Grinnel Glove Co., Ltd., intend shortly to take up the tanning of sealskins, for which there is a good market locally.

Duncan, B.C.

As the result of the receipt of several large foreign orders the Geno Bay lumber mill has re-opened for operation.

Kelowna, B.C.

A scheme is under consideration by a syndicate of Kelowna farmers in conjunction with eastern tobacco manufacturers to re-establish the tobacco-growing industry in the Okanagan Valley on a co-operative basis. It is stated that the ill success of the venture under the British North American Tobacco Company was due to mistakes in the management, and not to any inherent defects of the tobacco.

New Westminster, B.C.

Construction work has started on the new mills and elevator for the Brackman-Ker Co., Ltd., at New Westminster. The estimated cost of the plant and machinery is $60,000 and the plans comprise a 50,000 bushel elevator, mills, warehouse and fertilizer sheds.

The Heaps Engineering Co., Ltd., are in process of removing to their new plant on Lulu Island near New Westminster. The shops and main building cover an area of 411 by 234 feet. The products of this plant are mainly shingle machinery, gasoline engines, and heavy castings.

The Pacific Chocolate Company, Ltd., whose works at New Westminster were burnt out recently, have decided to go into liquidation, and the Westminster Trust Company, provisional liquidators, will call for tenders for the purchase of the plant, wharf, buildings and equipment and city lease, either separately or as a whole.

Port Alberni, B.C.

Mr. D. H. Sears is contemplating the erection of a shingle mill here next spring.

Vancouver, B.C.

The Trade and Commerce Department, Ottawa, are open to receive tenders until November 30th for construction of a 1,500,000 bushel grain elevator at Burrard Inlet. The elevator is estimated to cost from $750,000 to $1,000,000.

Tenders will be called shortly for painting the $350,000 Immigration Building for the Dominion Government, Department of Public Works.

The British Columbia Sulphite Fibre Company, Ltd., have now put into operation their additional plant, which practically doubles their previous output and are now working 24 hours a day.

Important interests have had under consideration the erection of a plant for the manufacture of nitrates by electrolytic fixation of atmospheric nitrogen, which is being successfully conducted in Norway. The war has delayed further action in the matter for the present.

The Burrard Inlet Bridge Company have now received the report of Mr. Ralph Modjeski, of Chicago, upon the three plans and tenders competing for the Second Narrows bridge at Vancouver. He advises that the company prepare their own official plans and call for fresh tenders upon same. The bridge will have the largest draw-span in the world and will cost about $2,000,000. The contract for the substructure will, however, be let shortly, as soon as plans can be prepared.

A site has been arranged for from the Great Northern Railway in False Creek for the Seattle Brewing & Malting Company, who will remove to Vancouver from Seattle.

Victoria, B.C.

The incorporation of the Associated Cement Company of Canada, Ltd., under Dominion charter, with headquarters at Victoria, and a capital of $2,000,000, does not represent the establishment of a new industry as stated in the press. The company has been in operation for some time at Bamberton, B.C., as the Associated Cement Company, Ltd., an English company, and the registration as a Canadian company implies no change in the management.

NEW BRUNSWICK.

St. Stephen, N.B.

The shoe factory of Trimble Bros. & Company was destroyed by fire.

NOVA SCOTIA.

Halifax, N.S.

Mr. Frank Reardon, 25 Seymour Street, has decided to rebuild his factory which was burned down recently, involving a loss estimated at $40,000.

Wolfville, N.S.

Work is expected to commence this fall on the construction of an $8,000 skating rink for Acadia College.

ONTARIO.

Amherstburg, Ont.

The erection of a factory at Windsor, for making concrete products, is being considered by W. T. Atkinson.

Arnprior, Ont.

The factory of the National Dress Company, of Arnprior, Ontario, has been running full time during the present depression. "We are now booking spring orders," say the company, "and from present business, owing to very little foreign goods coming to Canada for 1915, we find that it will be necessary to install more machines before Christmas, consequently giving employment to more people through the winter."

Berlin, Ont.

The Berlin branch of the Canadian Furniture Manufacturers, which has been closed down since June owing to the stock rooms being filled to capacity, has recently resumed operations with a large staff of men, to work eight hours per day five days per week. During the intervening months practically all of the stock has been disposed of.

The rubber factories at Berlin, Ont., are working two shifts a day to turn out orders for the Canadian and British governments for winter equipment. All shoe and leather manufacturing firms are also working full time, and in some cases overtime, to turn out orders.

Brampton, Ont.

The new factory building being erected for Lindners, Limited, is being pushed forward with all possible speed so that the company may commence operations early in the new year.

An old tannery property, which was taken over some time ago by Mr. John McMurchy, has been thoroughly renovated and machinery is being installed for the manufacture of woolen underwear and hosiery. It will be running within three weeks.

Brantford, Ont.

The Massey-Harris Company, which closed down the day after war was declared, throwing 1,200 men out of work here, will in a few days start up again, employing 800 men five days a week. Married men will be given the preference.

Bridgeburg, Ont.

The new factory of the Tuttle & Bailey Mfg. Co. of Canada, Limited, is now practically complete and the machinery is being moved in gradually.

Chatham, Ont.

The Sutherland Innis Company's header mill, dry kiln and boiler house have been destroyed by fire.

Collingwood, Ont.

Mr. James Vansise is contemplating the erection of an evaporator plant next spring at an estimated cost of $3,000.

Deer River, Ont.

At an estimated cost of $12,000 the Trenton Cooperage Mills, Limited, Spragg Street, Trenton, are contemplating the rebuilding of their plant next spring.

Deseronto, Ont.

The business and plant of the Rathbun Company has been taken over by the Deseronto General Machine Works, who will devote themselves to the repair of marine, stationary and small locomotive engines, farm implement repairs, new and repair millwright work of every description, boiler and sheet iron work, steam-fitting and tinsmithing, etc.

Hamilton, Ont.

Machinery has recently been installed by the Canadian Drawn Steel Company for making finished machine keys of all shapes and sizes.

Harriston, Ont.

There is every prospect that an upholstery factory, financed by United States capital, will be running by the first of the year.



MANUFACTURERS' AUTOMATIC SPRINKLERS

Pay for themselves in five years with money saved in insurance rates alone, and they give positive protection against disastrous fires.

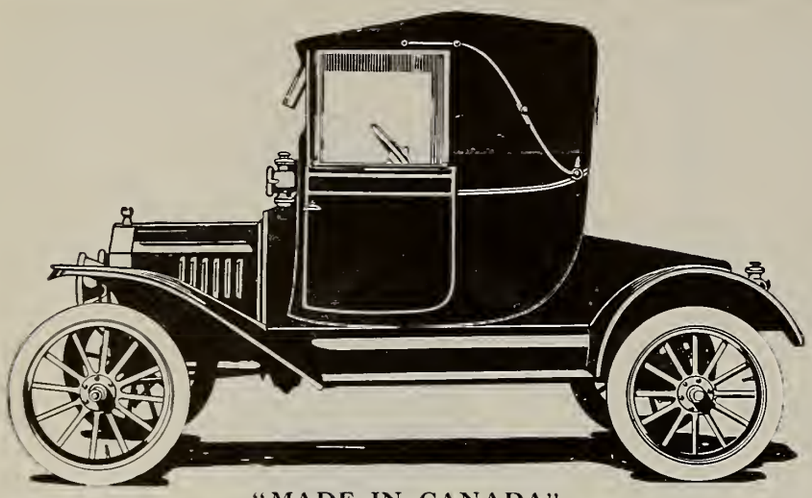
Have you thought of what the consequences of a disastrous fire will be to YOU—your lost business will go to your competitors, and your valuable working force will become scattered.

Let us quote you on equipping your old or new plant.

WRITE TO-DAY

THE GENERAL FIRE EQUIPMENT CO., Ltd.

72 Queen St. East :: Toronto, Canada



"MADE IN CANADA"

The Ford Coupelet

A car of style in a class by itself. Beauty in design. Rich in appointment. Roomy and comfortable. Every detail in material, make and finish carries the highest quality. Ford efficiency and large production making possible the following price

Fully Equipped (*f.o.b. Ford, Ont.*) **$850**

Buyers of this practical Ford car will share in profits, if we sell at retail 30,000 new Ford cars between August 1914 and August 1915.

Ford Motor Company
OF CANADA, LIMITED.

FORD -:- ONTARIO

Ford
THE UNIVERSAL CAR

Listowel, Ont.

At a cost of $4,000 the Perfect Knit Mills Company will build an extension to their factory.

Inter-switching facilities between the G. T. R. and C. P. R. in connection with the erection of a $100,000 factory for Messrs. Libby, McNeil & Libby, Chicago, Ill., has been ordered by the Dominion Railway Board.

London, Ont.

The factory of the Dominion Brass Corporation, and C.N.W. Shoe Company, has been destroyed by fire.

D. Cusolito has been given permission to erect a fireworks factory on First Street.

Orangeville, Ont.

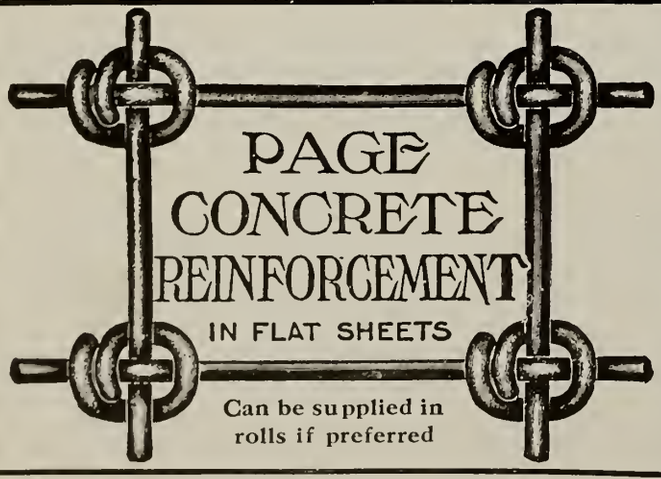
The Dods Knitting Company's mill will be in operation in less than a month.

Ottawa, Ont.

Prices are being taken on roofing, plastering, painting, heating and plumbing in connection with the construction of a steel, reinforced concrete and brick factory building on Sparks Street, at an estimated cost of $15,000, for Mr. Robt. Brown, 367 Sparks Street.

We understand that the Bishopric Wall Board Co., Limited, in spite of the fact that they have stock made up sufficient for requirements of their business, have decided to continue operations in order to keep their work people in employment.

The erection of a central yard and workshop for the city has been recommended by Mr. F. C. Askwith, city engineer.



For Concrete Road Pavement, Walks, Building Floors, Etc.

We are the *originators* of this wire reinforcement in flat sheets, and it is coming into universal use wherever introduced. We have supplied many carloads of it this past season.

The standard mesh for road pavement is 6 x 12 inches; for bridges and building floors, the standard is 3 x 6 inches. Also, other meshes as desired. All sheets 4 feet wide, and any length specified that can be loaded in cars.

Samples will be sent upon request

We also supply Iron Fences, Fire Escapes, Office Wire Work, and all kinds of Builders' Wire and Iron Work.

The Page Wire Fence Co., Limited

Dept. 20a

1137 King St. W. TORONTO — 505 Notre Dame St. W. MONTREAL — 87 Church St. WALKERVILLE — 39 Dock St. ST. JOHN, N.B.

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.

SHEETS TUBES **COPPER & BRASS** AND RODS

SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT

115-121 SUMACH STREET - - - TORONTO, CANADA

Ottawa, Ont.

The erection of a central yard and workshop for the city has been recommended by Mr. F. C. Askwith, city engineer.

A reinforced concrete and brick factory is being built by Robert Brown. Tenders for heating are called.

Mr. E. J. Durocher is receiving tenders on plastering, painting, heating, plumbing and electrical work in connection with the construction of $20,000 store and apartments on Rochester Street.

Pembroke, Ont.

The H. & H. Box Company is erecting a factory and dry kilns.

St. Catharines, Ont.

The St. Catharines Silk Mills, Limited, have leased premises for silk manufacturing, storage and shipping.

St. Mary's, Ont.

The St. Mary's Wood Specialty Co., are in the market for a number of machines.

Sarnia, Ont.

It is reported that the Sarnia Sheet Metal Products Company is in the market for $40,000 worth of machinery, to be utilized in the manufacture of sheet metal goods.

Stratford, Ont.

The Colonial Player Piano Company have closed negotiations with this city to establish a factory.

The Classic Furniture Company's plant was completely destroyed by fire on Nov. 11. The loss is estimated at $30,000, and thirty-five persons will be thrown out of employment.

Toronto, Ont.

Tenders are invited for plastering the store and residence on College Street and Manning Avenue, for Modern Ladies' Tailoring Company, 780 College Street.

Maples, Limited, manufacturers of syrups, etc., will occupy the new factory being erected on Dufferin and Van Horne streets.

Work is being rushed on the new million dollar Methodist Publishing House so rapidly that it will be ready for occupancy in the spring. This will be six months ahead of expectations.

Mr. J. J. McCaffrey is contemplating the erection of a ten-storey fireproof hotel building on Adelaide and Bay streets.

Messrs. McLaughlin-Gourlay Company have started work on alterations to the hotel owned by Hoshals, Limited. Improvements are estimated to cost $20,000.

It is hoped, with ordinary winter weather, to keep on erecting the steel for the new Registry office.

A permit has been applied for for the erection of a warehouse by Anderson and MacBeth, at an estimated cost of $50,000.

Wallaceburg, Ont.

The plant of the Dominion Glass Company has been reopened.

Welland, Ont.

A factory will be built by the Candied Fruits Confectionery Co., Limited, here. This company has a capital of $40,000.

Windsor, Ont.

Mr. W. T. Atkinson, of Amherstburg, Ontario, is contemplating the construction of a factory building for the manufacture of tile and concrete products.

Messrs. Thos. J. Eansor & Company are contemplating the construction of a plant for the manufacture of structural steel, woodwork, etc.

PRINCE EDWARD ISLAND.

Summerside, P.E.I.

Messrs. M. T. Schurman & Company's sash and door factory has been destroyed by fire.

QUEBEC.

Montreal, Que.

The sub-contract for Mr. James Strachan for stone trimming in connection with addition to bakery on 246 City Hall Avenue, at an estimated cost of $100,000, has been awarded to the Wallace Sandstone Quarries, Limited, Transportation Building.

A Belgian manufacturer, whose factory near Ghent was recently destroyed by the Germans, has a proposition on foot to establish a spinning factory in Quebec Province within a reasonable distance from Montreal. Fifteen hundred hands selected from among the Belgian refugees would be employed.

Tenders will be called in a few days for the general contract in connection with the construction of a theatre and apartment house estimated to cost about $300,000. The Promotion Company of Canada, Transportation Building, are said to be interested.

An extension is being built to the Martin-Senour Paint Company's factory.

Quebec, Que.

The shoe factory, owned by Messrs. Gale Bros., which has been burned, will be rebuilt at once.

SASKATCHEWAN.

Moose Jaw, Sask.

An agreement has been made with the City Council to construct a plant for the manufacture of linseed oil, etc., for the International Linseed Company, of Cincinnati, Ohio.

Regina, Sask.

The City Council sustained a loss estimated at $6,000 from damage by fire to a warehouse on St. John and Eighth Street, of which they are the owners. The building was occupied by the Stamco Bedding Co., Limited.

The Canyon City Sawmills Company, Limited, Creston, B.C., have erected temporary buildings in connection with their lumber business at Innismore. Permanent buildings will not be constructed until the spring.

Work will be started in a short time on the $10,000 warehouse to be erected for Cushing Bros.

Saskatoon, Sask.

An extension is being made to the plant of the Western Corrugated Culvert Company. This is the second extension in the four years in which the company has been in business.

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS
*The Ford-Smith Machine Co., Ltd., Hamilton.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.

ACETYLENE WELDING APPARATUS
*L'Air Liquide Society, Montreal, Que.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.
Hough Lithographing Co., Ltd., Toronto.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

AIR WASHERS
*The Canadian Service Co., Windsor, Ont.

ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE
E. L. Drewry, Winnipeg, Man.

ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS
*T. Pringle & Sons, Montreal.

ASBESTOS:
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS BUILDING LUMBER
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CEMENT SHINGLES
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CORRUGATED SHEATHING
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS MILLBOARD
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS PRODUCTS;
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS ROOFING SLATES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS SHEATHING:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS THEATRE CURTAINS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.

AUTOMATIC MACHINERY
*The Ford-Smith Machine Co., Ltd., Hamilton.

AUTOMATIC SPRINKLERS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

AWNINGS
*Smart-Woods, Ltd., Montreal.

AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS
*Smart-Woods, Ltd., Montreal.

BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal, Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN
*Berry Bros., Ltd., Winnipeg, Man.

BALL BEARING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

BANK AND OFFICE RAILINGS
*The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS and CAGES:
*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Toronto.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Goldie & McCulloch Co., Ltd., Gadt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville, Ont.
*Smart-Woods, Ltd., Montreal.

BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER
E. L. Drewry, Winnipeg, Man.

BELT FASTENERS
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELT DRESSING:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
J. L. Goodhue & Co., Danville, P.Q.
Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Goodyear Tire & Rubber Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

BELTING (stitched cotton duck)
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS
Samuel May & Co., Toronto.

BILLIARD TABLES
J. D. Clark Billiard Co., Winnipeg.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:
*A. C. Leslie & Co., Montreal.

BLANK BOOKS:
*Morton, Philips & Co., Montreal.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.

BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS
*Canadian H. W. Johns-Manville Co., Toronto.
Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Canadian Allis-Chalmers, Limited, Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, London, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Jenckes Machine Co., Sherbrooke.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, heating:
*The Goldie & McCullough Co., Ltd. Galt.

BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.

BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd Brantford

BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BOILER STANDS
Anthes Foundry Ltd., Toronto.

BOLSTERS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:
*The National Acme Mfg Co., Montreal.

BOLT CUTTERS:
*Canada Machinery Corporation, Galt.

BOLTS AND NUTS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co. Ltd., Stratford, Ont.

BOOKLETS
Stone Limited, Toronto.
R. G. McLean, Toronto.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,
Ames-Holden-McCready, Ltd., Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

*For Display Advertisement See Index, Page 437

EDDY'S



MATCHES

When writing advertisers, please mention INDUSTRIAL CANADA.

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Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.
Samuel May & Co., Toronto.

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*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

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The Arlington Co. of Canada, Ltd., Toronto.

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The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
G. & J. Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAIDS AND NOVELTIES:
The Moulton Mfg. Co., 236 Craig St. E., Montreal.

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Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton.

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*Tallman Brass & Metal Co., Hamilton.

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BRASS FOUNDERS AND FINISHERS.
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*Tallman Brass & Metal Co., Hamilton.

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*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
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The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
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BRASS PLATES
Geo. Booth & Son, Toronto.
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Canadian Seamless Wire Co., Ltd., Toronto.
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BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
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Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

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National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

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*Canada Foundry Co., Ltd., Toronto.
Canadian Allis-Chalmers Ltd., Toronto.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.
*The Bawden Machine Co., Limited, Toronto.

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Geo. Booth & Son, Toronto.

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*Boeckh Bros. Co., Ltd., Toronto.
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Simms, T. S., & Co., Ltd., Fairville, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd. Toronto.

BUCKET TANKS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

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Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

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*The Ford-Smith Machine Co., Ltd., Hamilton.

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*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

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*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

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The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE:
*Northern Electric Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:
*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS
Hough Lithographing Co., Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

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Rolph & Clark, Ltd., Toronto.

CAMERAS
Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

CANVAS
*Smart-Woods, Ltd., Montreal.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PAPER:
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

CARBON PRODUCTS
Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
Canada Carbide Co., Ltd., Montreal. Que.

CARDBOARD
Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS
Toronto Carpet Mig Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.
*Richard-Wilcox Canadian Co., Limitd, London, Ont.

CARRIERS, box and barrel
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*Wm. & J. G. Greey, Toronto.

CARS, industrial:
*Wm. & J. G. Greey, Toronto.
*Sheldons, Ltd., Galt.

CARTONS, lithographed
Harris Lithographing Co., Toronto.

CASEMENTS, steel
*Herbert Morris Crane & Hoist Company, Ltd.

CASTINGS:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

CASTINGS, brass and bronze:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:
*Galt Malleable Iron Co., Ltd Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CAST IRON PIPE:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

CATALOGUE MAKERS
Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIN BLOCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Herbert Morris Crane & Hoist Company, Ltd.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS
Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO
Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel
The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S
*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Canadian H. W. Johns-Manville Co., Toronto.
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

*For Display Advertisement See Index, Page 437



There are no openings in buildings that cannot be closed properly by Ormsby Underwriters Fire Doors.

Studying out satisfactory doors for awkward openings has made us proficient in that branch of work. Abattoirs have many such problems to be solved on account of their overhead tracks. Practically all abattoirs in this country are equipped with the Ormsby Underwriters Fire Doors, and every one has given entire satisfaction.

ORMSBY Underwriters FIRE DOORS

This type of door, the Tin Armored, is the accepted standard of protection from fire. Built up of layers of kiln dried lumber and completely covered with the best grade of tin, they are at once rigid and fire proof under the fiercest heat. They offer a resistance to fire that would buckle and twist doors made entirely of steel.

We will be pleased to send complete information to those interested.

The A. B. ORMSBY Co.
Limited, Toronto

Associated with the Metal Shingle and Siding Co., Limited

Factories at Montreal, Toronto, Preston, Winnipeg, Saskatoon, Regina, Calgary, Edmonton

AGENTS—

Vancouver, N. J. Dinnen & Company
Victoria " "
Winnipeg " "
Calgary, " "
Edmonton " "

Regina, McKenzie Hazel Supply Co,
Moose Jaw, General Builders' Supply Co.
Prince Albert, Bowman Supply Co.
Port Arthur and Fort William, Twin City Sand Co.

Quebec, J. A. Bernard.
Ottawa, Canadian Agency & Supply Co.
Halifax, Frank A. Gillis & Company.
St. John, J. C. Berrie.

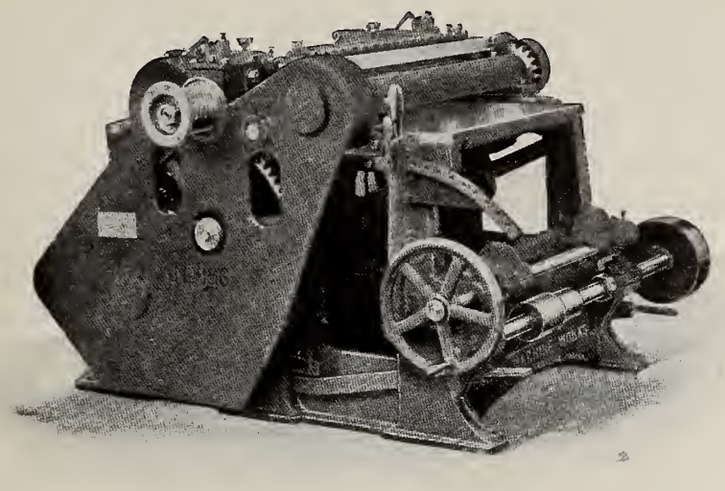
CLUTCHES, conveyors.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.
COATS
Peerless Overall Co., Rock Island, Que.
COBALT OXIDE
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.
COCOA AND CHOCOLATE PREPARATIONS
Walter Baker & Co., of Canada, Ltd., Montreal, Que.
COFFEE
S. H. Ewing & Sons, Montreal, Que.
COFFEE IMPORTERS, Roasters and Manufacturers
C. H. Cochrane & Co., Ottawa, Ont.
COLD DRAWN SCREW STEEL:
*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD DRAWN SHAPES, flats, squares and hexagons:
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.
COLLAR BUTTONS
The Arlington Co., of Canada, Ltd., Toronto.
COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.
COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.
COLLARS AND CUFFS waterproof
Williams, Greene & Rome, Berlin, Ont.
COLORS
Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin Williams Co. of Canada. Ltd., Montreal, Que.
COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto.
COMMERCIAL STATIONERS
Rolph & Clark, Ltd., Toronto.
COMMERCIAL STATIONERY:
*Brown Bros,, Ltd., Toronto.
*Morton, Phillips & Co., Montreal.
COMPRESSORS
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
CONCENTRATORS:
*Jenckes Machine Co., Sherbrooke.
CONCRETE COATINGS, paints, etc.
The Imperial Varnish & Color Co., Ltd., Toronto.
CONDUITS FOR INTERIOR WIRING
*Conduits Company, Ltd., Toronto.
CONFECTIONERY
Ganong Bros., Ltd., St. Stephens. N.B.
Moirs, Limited. Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.
CONTRACTORS' PLANT
The Western Steel & Iron Co., Ltd., Winnipeg, Man.
*M. Beatty & Sons, Ltd., Welland, Ont.
CONVEYORS:
*Dodge Mfg. Co.. Ltd.. Toronto.
*Wm. & J. G. Greey, Toronto.
*Jenckes Machine Co.. Sherbrooke.
COOLING APPARATUS
*The Canadian Service Co., Ltd., Windsor, Ont.
COPPER:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
COPPERSMITHS
*The Booth-Coulter Copper and Brass Co. Ltd., Toronto.
COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd.. Toronto.
*Booth-Coulter Copper & Brass Co., Ltd.. Toronto.
COPPERWARE AND LANTERNS
Sheet Metal Products Co. of Canada. Ltd.. Toronto.
COPPER WIRE
Canadian Seamless Wire Co., Ltd.. Toronto.

CORDS, braided, spun, knitted
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
CORKS
S. H. Ewing & Sons, Montreal, Que.
CORK BOARD INSULATION
*Robinson Bros. Cork Co., Ltd., Toronto.
CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.
CORK, granulated
*Robinson Bros. Cork Co., Ltd., Toronto.
CORRUGATED BOXES:
*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORRUGATED PAPER:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORSETS
Dominion Corset Co., Quebec, Que.
COTTONADES
Hamilton Cotton Co., Hamilton, Ont.
COTTON TEXTILES:
*Dominion Textile Co., Montreal.
COUPLERS
*Canadian Steel Foundries, Ltd.. Welland, Ont.
COUPLERS, steel bar:
*Canadian Steel Foundries, Ltd., Montreal.
COUPLINGS:
*Dodge Mfg. Co.. Ltd.. Toronto.
*Wm. & J. G. Greey, Toronto.
CRANES:
*Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
CRANKSHAFTS
Canada Forge Co., Ltd., Welland, Ont.
CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Ltd. Montreal, Que.
CREAMERY AND CHEESE FACTOR MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Peterboro, Ont.
CREOSOTED MATERIALS:
*The Dominion Creosoting Co.. Ltd. Vancouver, B.C.
CRUSHERS, rock.
*Canadian Allis-Chalmers, Limited, Toronto.
CRUSHING ROLLS:
*Jenckes Machine Co., Sherbrooke.
CUES
Samuel May & Co., Toronto.
CUFFS
The Standard Shirt Co., Ltd., Montreal, Que.
CUPOLAS,
*Sheldons. Ltd.. Galt.
The Northern Crane Works, Ltd., Walkerville.
CUPS, presentation
Standard Silver Co., Toronto.
CUPS, grease and oil
*The Canadian Winkley Co., Ltd., Windsor, Ont.
CURLED HAIR
Delany & Pettit, Ltd., Toronto.
CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.
CUTLERY
Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.
DENIMS
Hamilton Cotton Co.. Hamilton, Ont
DESIGNERS
Ontario Engraving Co., Hamilton, Ont.
DESIGNERS and PRINTERS OF BOOKLETS, ETC.
Grip, Ltd. Toronto.
DINING ROOM SUITES
The George McLagan Furniture Co., Limited. Stratford, Ont.
DIES
*Butterfield & Co.. Rock Island, P.Q.
DISC GRINDERS
*The Ford-Smith Machine Co., Ltd.. Hamilton.
DISINFECTING APPARATUS
Spramotor Co., London, Ont.
DOOR HANGERS
*Canadian Allis-Chalmers, Ltd., Toronto.
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS
Daly & Morin, Montreal, Que.
DREDGES
*M. Beatty & Sons, Ltd., Welland, Ont.
DRESSING, belt
Sadler & Haworth, Montreal, Que.
DRESS AND CLOAK TRIMMINGS
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
J. Henry Peters Co., 1 Mincing St., Toronto.
DRILLS:
*Canada Machinery Corporation, Galt.
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.
DRILLS, rock
*Canadian Allis-Chalmers, Ltd., Toronto.
DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.
DROP FORGINGS:
*Canadian Billings & Spencer, Ltd., Welland.
DROP HAMMERS:
*Canada Machinery Corporation, Galt.
DRY BATTERIES
*Northern Electric Co., Ltd., Montreal, Que.
DRY CELLS, electric
Canadian Carbon Co., Ltd., Toronto.
DRY COLORS
P. D. Dods & Co., Ltd., Montreal. Que.
The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co.. Ltd.. Windsor, Ont.
DRY KILN EQUIPMENT
*The Canadian Service Co., Ltd., Windsor, Ont.
DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto.
DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd.. Montreal.
DYERS AND FINISHERS
R. Parker & Co., Toronto.
DYNAMITE
Canadian Explosives Ltd., Montreal. Que.
DYNAMOS.
*Canadian General Electric Co., Ltd., Toronto.
Consolidated Electric Co.. Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.
EIDERDOWN
Galt Knitting Co., Ltd., Galt.
ELECTRIC APPLIANCES.
*Canadian Crocker-Wheeler Co.. Ltd.. St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co.. Ltd Hamilton.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC BATTERIES.
*Canadian General Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd. Montreal, Que.
ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg Co.. Ltd., Toronto.
*Tallman Brass and Metal Co., Hamilton. Ont.
ELECTRIC INSULATED WIRE
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC LAMPS.
*Canadian General Electric Co., Ltd., Toronto.
*Packard Electric Co.. Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC PLATE WARE
Roden Bros.. Ltd.. Toronto.
ELECTRIC BATTERIES
Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING
Central Press Agency, Toronto.
ELECTRICAL SUPPLIES
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Crouse-Hinds Co. of Canada, Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Jones & Moore Electric Co., Ltd., Toronto.
*Munderloh & Co., Montreal.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto.
ELEVATORS:
*Jenckes Machine Co., Sherbrooke.
Turnbull Elevator Mfg. Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.
ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford.
ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto.
ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.
ELEVATORS, hydraulic and electric
John McDougall Caledonian Iron Works Co.. Ltd.. Montreal, Que.
EMERY DRESSERS and STANDS
*The Ford-Smith Machine Co., Ltd., Hamilton.
EMERY GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.
EMERY WHEELS
*The Ford-Smith Machine Co., Ltd., Hamilton.
EMERY WHEEL GUARDS
*The Ford-Smith Machine Co., Ltd., Hamilton.
EMERY WHEEL Safety Flanges
*The Ford-Smith Machine Co., Ltd., Hamilton.
ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.
ENAMELED KITCHENWARE:
*The Davidson Mfg. Co., Ltd., Montreal.
ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.
ENGINES
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Sheldons, Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.
ENGINES, gas and gasoline
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Massey-Harris Co., Ltd., Toronto.
ENGINES, gasoline tractor plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Limited, Montreal.
ENGINES, hoisting
*M. Beatty & Sons, Welland.
*Waterous Engine Works Co., Ltd., Brantford.
ENGINES, marine gasoline
*Canadian Fairbanks-Morse Co., Limited, Montreal.
ENGINES, steam plowing and threshing
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
Sawyer-Massey Co.. Ltd., Hamilton, Ont.

*For Display Advertisement, See Index, Page 437



Berlin Surfacers

WE have specialized in planing machines for years. Berlin surfacers represent the experience of all these years. You can make no mistake by putting your surfacing requirements up to us. We build surfacers for every purpose. Whatever surfacing you want to do may be done at lowest cost on Berlin.

Are Your Cabinet Surfacers Losing Money For You at the Sander?

Are you thinking of replacing or adding to your present surfacing equipment? Then judge the earning-power of Berlin Surfacers by comparing them with others. Mail your card request for complete data now — so you'll have it for reference when you want it.

DON'T depend on your sander to correct the inferior work of your surfacers. That isn't profitable. The inefficiency of one machine is handicapping the other.

Surface your stock on the Berlin "156" Single Cabinet Surfacer. Then once through at the sander will suffice. And instead of sanding two pieces at one time the uniformity of the surfacing will enable your sander operator to feed stock across the entire width of the machine. Its efficiency is increased 100 per cent. That assures profit, absolutely.

Equipped with round heads carrying thin stee knives, which may be ground and jointed on the machine the "156" produces a finish that shines. Sanding all your stock won't be necessary.

The sturdy construction and the use of only proven design features assures low upkeep cost. There'll be fewer necessary shut downs, less lost time. The top in-feed roll and chip-breaker may be sectional. The wedge method of bed adjustment assures its stability. Fine finish is therefore assured always.

BERLIN MACHINE WORKS, Limited, Hamilton, Ont.

Largest Manufacturers of Woodworking Machinery in the World

UNITED STATES PLANT BELOIT, WISCONSIN

ENGRAVERS
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton Ont.
Rolph & Clark, Ltd., Toronto.
Stone, Limited, Toronto.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote
American Bank Note Co., Ottawa, Ont.

ENGRAVING:
*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.

ENVELOPES
Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

ESCUTCHEON PINS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR
Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS
Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto.

EXPLOSIVES, high
Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.
J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

FASTENERS, belt
Sadler & Haworth, Montreal, Que.

FENCES and GATES:
*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire
Banwell Hoxie Wire Fence Co., Hamilton, Ont.

FENCES, iron
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

FENCING, wire
The Great West Wire Fence Co., Ltd., Winnipeg, Man.
C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:
*The E. B. Eddy Co., Ltd., Hull.

FILES
Henry Disston & Sons, Ltd., Toronto.
*The Nicholson File Co., Port Hope, Ont.

FIRE ALARM APPARATUS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE DOOR HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:
*Waterous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:
*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS
*The Booth-Conlter Copper and Brass Co., Ltd., Montreal, Que.
*Canadian H. W. Johns-Manville Co., Toronto.
*The General Fire Equipment Co. Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford.

FIRE HOSE
*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.
Dunlop Tire and Rubber Goods Co., Limited, Toronto.
*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Rockwood Sprinkler Co., of Canada, Ltd., Montreal, Que.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FIREPROOF WINDOWS and DOORS:
*A. B. Ormsby, Ltd., Toronto.
*Geo. W. Reed & Co., Montreal.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King, Ltd., Montreal, Que.

FLAGS
*Smart-Woods, Ltd., Montreal.

FLASHLIGHTS
Canadian Carbon Co., Toronto.
Northern Electric Co., Ltd., Montreal, Que.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLOUR MILL MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.

FLUE LINERS
Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
*Sheldons, Ltd., Galt.

FORGINGS
Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton.

FOUNDRY EPUIPMENT
The Northern Crane Works, Ltd., Walkerville.
*The Ford-Smith Machine Co., Ltd., Hamilton.

FOUNTAIN FRUITS and Juices
J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:
*Dodge Mfg. Co., Ltd., Toronto.

FRICTION HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

FRINGES AND TASSELS
The Moulton Mfg Co., 236 Craig St. E., Montreal.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal. Que.

FUR TRIMMINGS, ornaments and buttons
The Moulton Mfg. Co., 236 Craig St. E., Montreal.
J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air
Bedford Stove Co., Bedford, Que.

FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:
*A. C. Leslie & Co., Montreal.

GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
*The Waterous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground
S. F. Bowser & Co., Toronto.

GASOLINE
*The Imperial Oil Co., Ltd., Toronto.

GAS PRODUCERS:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

GENERATORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.
*International Engineering Works, Ltd., Amherst, N.S.

GENERATORS, electric
*Canadian General Electric Co., Ltd., Toronto.

GINS
The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd. Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS
A. R. Clarke & Co., Ltd., Toronto

GLUE
Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.

GRATES.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*International Engineering Works Ltd., Amherst, N.S.

GRAVITY CARRIERS
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
*Canadian Allis-Chalmers, Ltd, Toronto, Ont.
*Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDING and Polishing Machinery
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDING WHEELS:
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.
*The Ford-Smith Machine Co., Ltd., Hamilton.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co. Limited, Stratford, Ont.

GUY ANCHORS
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*Northern Electric Co., Ltd., Montreal, Que.

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*Albert Mfg. Co., Hillsborough, N.B

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De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

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*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

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Taylor-Forbes Co., Ltd., Guelph, Ont.
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HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver
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HATS, ladies'- felt and straw
Toronto Hat Mfg. Co., Toronto.

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The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS
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*E. Leonard & Sons, London, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

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*The Goldie & McCullough Co., Ltd., Galt.

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*Northern Electric Co., Ltd., Montreal, Que.

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*Smart-Woods, Ltd., Montreal.

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*Northern Crane Works, Ltd., Walkerville, Ont.
*M. Beatty & Sons, Ltd., Welland, Ont.

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*Herbert Morris Crane & Hoist Company, Ltd
*M. Beatty & Sons, Ltd., Welland, Ont.

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*Canadian Allis-Chalmers, Limited, Toronto.
*M. Beatty & Sons, Ltd., Welland, Ont.

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*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.
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Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

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Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.

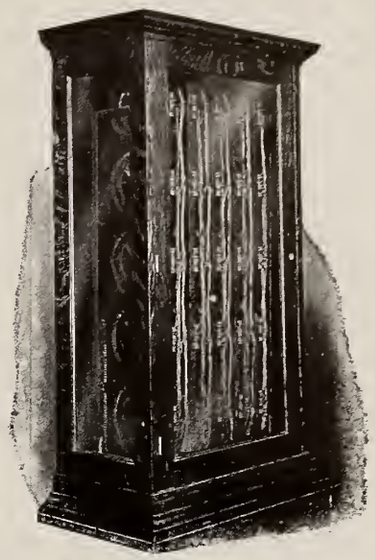
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*For Display Advertisement See Index, Page 437

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JEWELRY, gold filled
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KNIVES, pulp and paper
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

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*The J. C. McLaren Belting Co., Ltd., Montreal.

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Stratford Mfg. Co., Ltd., Stratford, Ont.

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Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

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LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

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Clarke & Clarke, Limited, Toronto.

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*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

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G. & J. Esplen, Montreal, Que.

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*Canadian H. W. Johns-Manville Co., Toronto.
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LUMBER, pickets and lath
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LUMBER, staves and heading
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

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*John Bertram & Sons Co., Ltd., Dundas, Ont.

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*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
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*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

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*The Waterous Engine Works Co., Ltd., Brantford.

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*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

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*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
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*Waterous Engine Works Co., Ltd., Brantford.

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*Canada Machinery Corporation, Ltd., Galt, Ont.
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W. P. Plant, Hastings, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

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MACHINERY, transmission
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*Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

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*Canadian H. W. Johns-Manville Co., Toronto.
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*Northern Electric Co., Ltd., Montreal, Que.

MOTORS, electric (alternating current)
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Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

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*Canadian Westinghouse Co., Ltd., Hamilton.
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*Jones & Moore Electric Co., Ltd., Toronto.

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Consolidated Electric Co., Ltd.. Toronto.

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*The Gramm Motor Truck Co., Ltd.. Walkerville.

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*Canada Machinery Corporation, Galt.

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Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NITROGEN
*L'Air Liquide Society, Montreal, Que.

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*John Morrow Screw & Nut Co.. Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

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A. Ramsay & Son Co., Montreal, Que.
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OILS (Petroleum products)
*British American Oil Co., Ltd., Toronto.

OILS, Petroleum
*The Imperial Oil Co., Ltd.. Toronto.

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Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

ORGANS
*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe
Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour
Goderich Organ Co., Goderich.

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*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

ORNAMENTS (dress, fur, cloak, etc)
The Moulton Manufacturing Co., Limited, Montreal.

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R. Parker & Co., Toronto.

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Bedford Stove Co., Bedford. Que.
*Wm. & J. G. Greey, Toronto.

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Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

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OVERHEAD RUNWAYS.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont

OXYGEN
*L'Air Liquide Society, Montreal, Que.

PACKING BOXES
Barchard & Co., Ltd., Toronto.

PACKING, engine:
Garlock Packing Co., Hamilton.

PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

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R. C. Jamieson & Co., Ltd., Montreal, Que.

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*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

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Standard Paint and Varnish Co., Ltd.. Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island, Que.

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Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, cover
Barber Paper & Coating Mills, Ltd. Georgetown, Ont.

PAPER, envelope
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co., Montreal. Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building
Bathurst Lumber Co.. Ltd., Bathurst, N.B.
*The Riordon Pulp and Paper Co., Montreal. Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, carbon
*Peerless Carbon and Ribbon Mfg. Co., Ltd., Toronto.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

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Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, enamelled blotting
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PAPER, genuine Canadian kraft, glazed and unglazed
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PAPER, label
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

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The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, wall
Stauntons, Ltd., Toronto.

PAPER, writing
The Toronto Paper Mfg Co., Cornwall, Ont.

PAPER, writing, high-grade
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine
*Rolland Paper Co., Ltd., Montreal, Que.

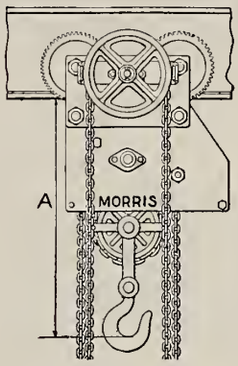
PAPER BOXES:
*Dominion Paper Box Co., Toronto.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Limited. Stratford, Ont.

*For Display Advertisement See Index, Page 437

MORRIS TRAVELING SPUR-GEAR BLOCKS

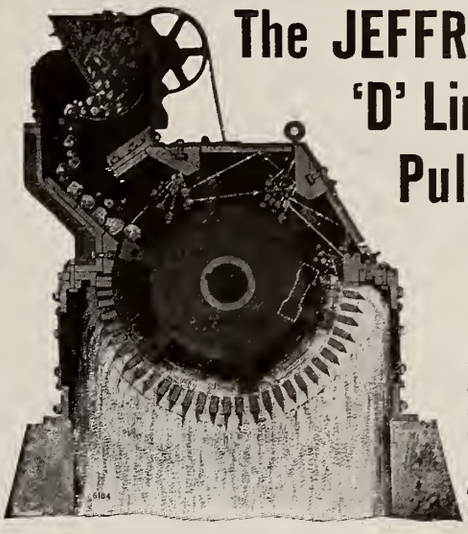


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All the Grinding is done in suspension.

Table of Capacities for 36" x 24" Type "D" Pulverizer

Material	Condition of Bars	Speed	Capacity Tons Per Hour	Screen Analysis of Product Per cent. Passing Screen indicated			
				10 Mesh	20 Mesh	40 Mesh	100 Mesh
Limestone. 97% Cal. Carbonate.	¾" Bars	1100	8 to 10	99%	95%	85%	60%
	No Bars	1060	40 to 50	80%	63%	42%	19%

Send for Bulletin No. 132

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PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

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PIANO, player actions
The Otto Higel Co., Ltd, Toronto.

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*Canadian Tube & Iron Co., Ltd., Montreal, Que.

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Standard Clay Products, Ltd., St. Johns, Que.

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Warden King Ltd., Montreal, Que.

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*Canada Machinery Corporation Galt.

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*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER OF PARIS
*Albert Mfg. Co., Hillsborough, N.B.
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER, hard wall
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land
*Albert Mfg. Co., Hillsborough, N.B.

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The James Morrison Brass Mfg. Co., Ltd., Toronto.

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PLUMBING SUPPLIES
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Daly & Morin, Montreal, Que.

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Hough Lithographing Co., Ltd., Toronto.

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*Northern Electric Co., Ltd., Montreal, Que.

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PRESSES, Filter
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic
William R. Perrin & Co., Ltd., Toronto.
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer
William R. Perrin & Co., Ltd., Toronto.

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*Canada Machinery Corporation, Galt.

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R. G. McLean, Toronto.

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*Southam Press, Ltd., Toronto and Montreal.

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*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

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PULP, Sulphide
Bathurst Lumber Co., Ltd., Bathurst, N.B.

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*International Engineering Works, Ltd., Amherst, N.S.
Spramotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
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*Canadian Allis-Chalmers, Limited, Toronto.
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Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

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*Bawden Machine Co., Ltd., Toronto.

PUMPS, turbine, and equipment
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*Canadian Allis-Chalmers, Ltd., Toronto. Ont.

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Daly & Morin. Montreal, Que.

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*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd.. Preston.

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*Canadian H. W. Johns-Manville Co.. Toronto.
Standard Paint Co. of Canada, Ltd., Montreal, Que.

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Dominion Bridge Co., Ltd., Montreal.

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of Canada, Ltd., Toronto.
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*Canadian Fairbanks-Morse Co., Ltd., Montreal.

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Shurly & Deitrich, Galt, Ont.

SAWS, band:
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*Canada Machinery Corporation, Galt.

*For Display Advertisement See Index, Page 437

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Shurly & Deitrich, Galt, Ont.

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*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
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*Canada Machinery Corporation, Galt.
Shurly & Deitrich, Galt, Ont.

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*The Waterous Engine Works Co., Ltd., Brantford.

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*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, for weighing
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, railway track, etc.
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*Canadian Fairbanks-Morse Co., Ltd., Montreal.

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*Jeffrey Mfg. Co., Montreal.
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*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

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*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton. Ont.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

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Slingsby Mfg. Co., Ltd., Brantford, Ont.

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*Canada Machinery Corporation, Galt.

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*Berry Bros., Ltd., Winnipeg.

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*Eureka Mineral Wool & Asbestos Co., Toronto.

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SKATES, hockey
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*The Canada Metal Co., Toronto.

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*Wm. & J. G. Greey, Toronto.

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H. Murton. Guelph. Ont.

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Guelph Spring & Axle Co., Ltd., Guelph, Ont.

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Guelph Spring & Axle Co., Ltd., Guelph. Ont.

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*Purdy, Mansell. Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

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STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

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Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

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*Jenckes Machine Co., Sherbrooke.

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Harris Lithographing Co., Toronto.

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*Canada Machinery Corporation, Galt.

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*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*M. Beatty & Sons, Ltd., Welland, Ont.

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*Sheldons, Ltd., Galt.

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*Canadian Sirocco Co., Windsor, Ont.

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*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

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*Dominion Bridge Co., Ltd., Montreal.

STEEL CASTINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

STEEL PEN STOCKS:
*Jenckes Machine Co., Sherbrooke.

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STEEL SASH:
*Dennis Wire & Iron Works. Co., London.
*Henry Hope & Sons, Ltd., Toronto.

STEEL SECTIONS
*Kawneer Mfg. Co., Ltd., Guelph, Ont.

STEEL SHELVING:
*Dennis Wire & Iron Works. Co., London.

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Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

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Central Press Agency, Toronto.

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*Otterville Mfg. Co., Ltd., Otterville, Ont.

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Bedford Stove Co., Bedford, Que.

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STOVE LININGS
Standard Clay Products, Ltd., St. Johns, Que.

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Gurney Foundry Co., Ltd., Toronto.
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont.

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*Otterville Mfg. Co., Ltd., Otter-

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*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*National Bridge Company of Canada, Ltd., Montreal, Que.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

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J. Eveleigh & Co., Ltd., Montreal,
The M. Langmuir Mfg. Co. of Toronto. Ltd., Toronto.

SURFACERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SWING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

SWITCHBOARDS
*Canadian General Electric Co., Ltd., Toronto.
*The Canadian Independent Telephone Co., Ltd., Toronto.
*The Northern Electric & Mfg. Co., Ltd., Montreal.

SWITCHES, railway
Canadian Ramapo Iron Works, Ltd. Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS
*Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

SYSTEMS, OFFICE
*Autographic Register Co., of Canada, Montreal.

TABLES, billiard
Brunswick-Balke-Collender Co. of Canada, Ltd., Toronto.
Samuel May & Co., Toronto.

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Hamilton Cotton Co., Hamilton. Ont.

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*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*E. Leonard & Sons, London, Ont.
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*International Engineering Works. Ltd, Amherst, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.

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Pratt and Whitney Co. of Canada. Dundas. Ont.
*Butterfield & Co., Rock Island, P.Q.

TAP WRENCHES
*Butterfield & Co., Rock Island, P.Q

TAPES, measuring
The Lufkin Rule Co.. of Canada. Ltd., Windsor, Ont.

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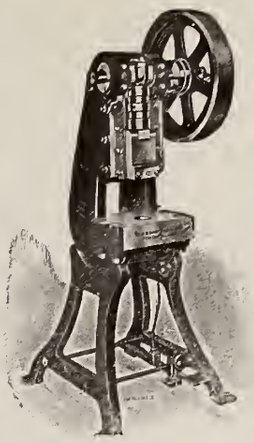
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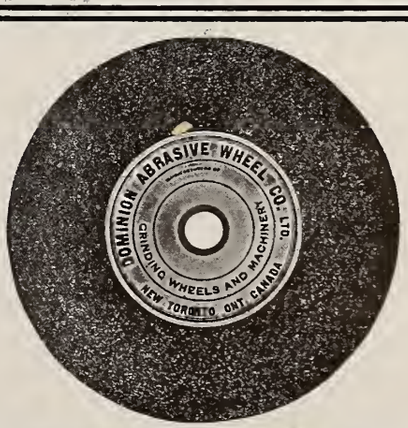
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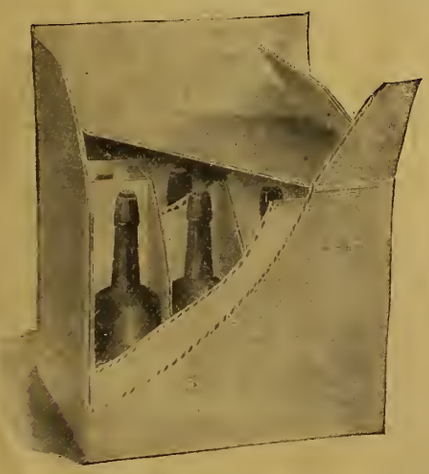
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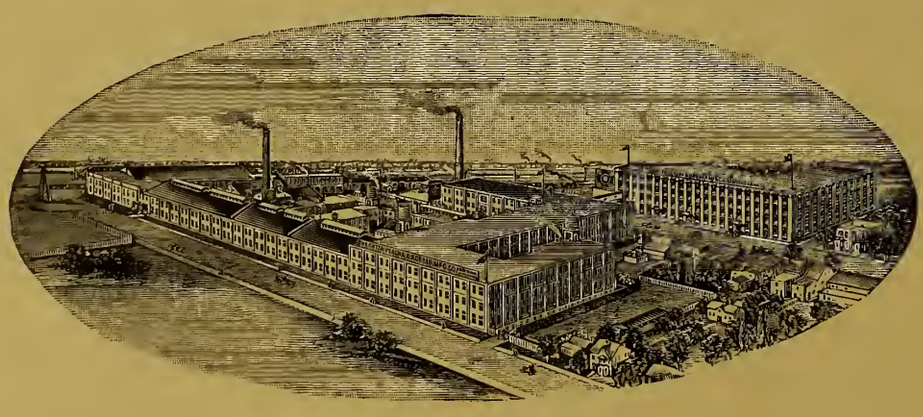
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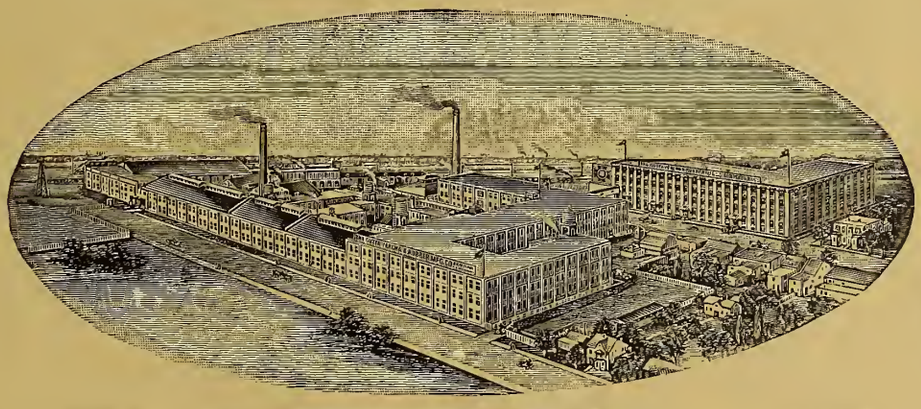
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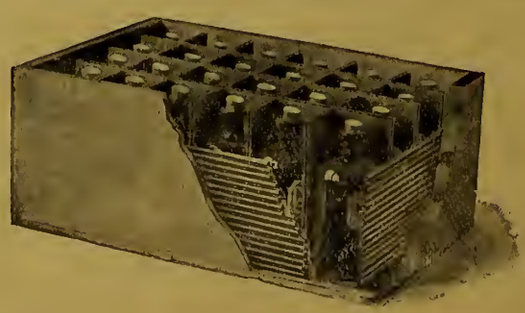
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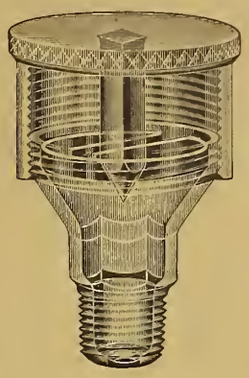
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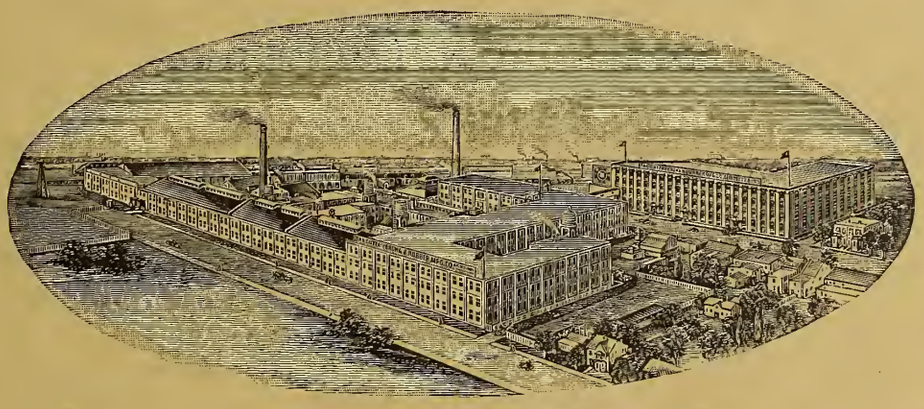
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EXECUTIVE OFFICES: MONTREAL



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FOR THE SHIPMENT OF BOTTLES, ETC.

The old-time saw-dust method of packing bottles, jars, etc., is fast becoming extinct in the best preserving and canning factories. The corrugated paper partition packing is the best insurance against breakage, allows of easier packing, saves labor and muss for both the shipper and the consignee.

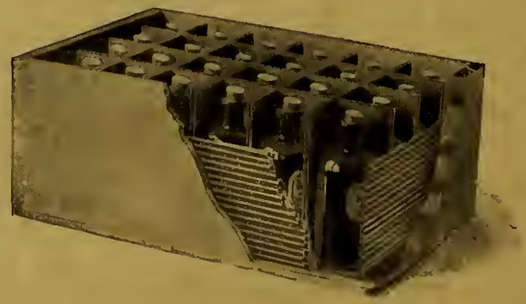
T. & N. Corrugated Boxes are used for all kinds of shipping. Send a sample case at our expense and we will return it to you packed in our goods.

The Thompson & Norris Co.
of Canada, Limited
Niagara Falls, Ont.

Send further particulars :

Name .....

Address .....
I.C.



The
Thompson & Norris Co. of Canada, Limited
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"Southern Cross"

COLD ROLLED ; CLOSE ANNEALED

Specially adapted for stove and range makers and others desiring a sheet to stand severe work. : :

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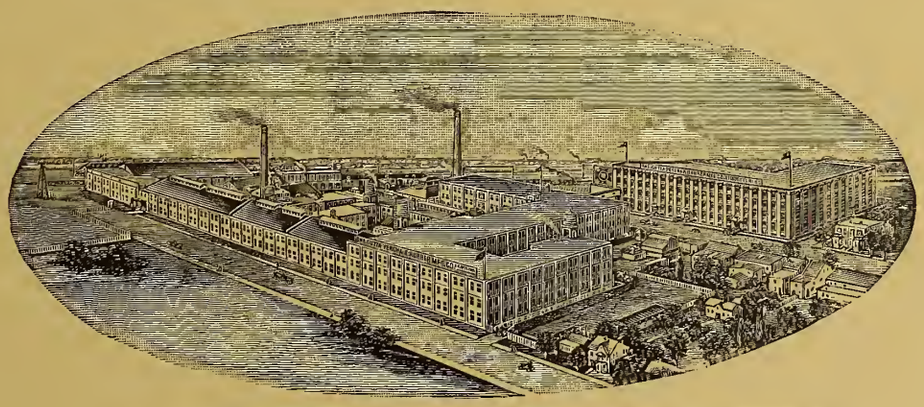
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Superior in Quality---Satisfactory in Service



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PACKINGS
VALVES
TUBING
TIRES
TILING
MATS
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Sole manufacturers of the celebrated "MALTESE CROSS" and "LION" Brands Rubbers. The best fitting, best wearing and most stylish rubber footwear on the market.

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SUCTION
STEAM
AIR
FIRE PROTECTION
ACIDS
BREWERS
PNEUM. TOOLS

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When writing advertisers, please mention INDUSTRIAL CANADA.

28 "Service" Branches Throughout Canada

Canadian Consolidated Rubber Co., Limited
Montreal, P.Q.

¶ Preach "Made in Canada" and also Practice "Made in Canada"

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GOODS THAT ARE "MADE IN CANADA"

¶ Let us quote you on Hose, Belting, Packing, Tires, and your other requirements in Rubber Goods

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Thompson-Norris Packing Methods preserve the freshness and attractiveness of the original package. They insure ready distribution and early repeat orders.

T. & N. CELLULAR BOARD AVERTS BREAKAGES

Send for Samples

The
Thompson & Norris Co. of Canada, Limited
NIAGARA FALLS, ONTARIO

BROOKLYN, N.Y. BOSTON, MASS. BROOKVILLE, IND. LONDON, ENGLAND

Vol. XV., No. 6 JANUARY, 1915 $2.00 per Year

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INDUSTRIAL CANADA



"ENTIRE CROP IS SOLD"

The entire apple crop of Canada has been sold.

Two months ago the buyers refused to buy; the growers refused to pick a great deal of the crop in the orchards.

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Then the Government took hold—and advertised. To take the place of foreign trade, the Government sought a greater demand at home.

IT ADVERTISED CANADIAN APPLES TO CANADIANS.

And Canadians responded—as they always do to skilful, well directed advertising.

The crop has been picked. The growers have sold it. Canada has saved millions of dollars worth of her greatest fruit product.

And to hundreds of thousand of Canadian homes the Canadian apple has brought health and nutriment. (*Ottawa Free Press—Oct., 1914.*)

The now famous "Apple Campaign" was planned, written and placed by

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119 West Wellington Street TORONTO

Tribune Building WINNIPEG Code—A.B.C. 5th Edition

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"No good man did, or ever should encourage cheapness at the ruinous expense of *unfitness*, which is always infidelity, and is dishonorable to a man. If I want an article let it be genuine, at whatever price; if the price is too high for me, I will go without it, unequipped with it for the present,—I shall not have equipped myself with hypocrisy at any rate. This, if you will reflect, is primarily the rule of all purchasing and producing men."—*Thomas Carlyle.*

WHEN we commenced refining Crude Petroleum at our works, Ashbridge's Bay, Toronto, about seven years ago, we nailed our colors to the mast of QUALITY. That's why our different products have gained such an enviable distinction.

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GASOLENE	BENZINE	LAMP OILS
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LUBRICATING OILS FOR STEAM, MOTOR AND ELECTRIC PLANTS

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"Southern Cross"

COLD ROLLED ; CLOSE ANNEALED

Specially adapted for stove and range makers and others desiring a sheet to stand severe work. : :

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ENGINEERS AND
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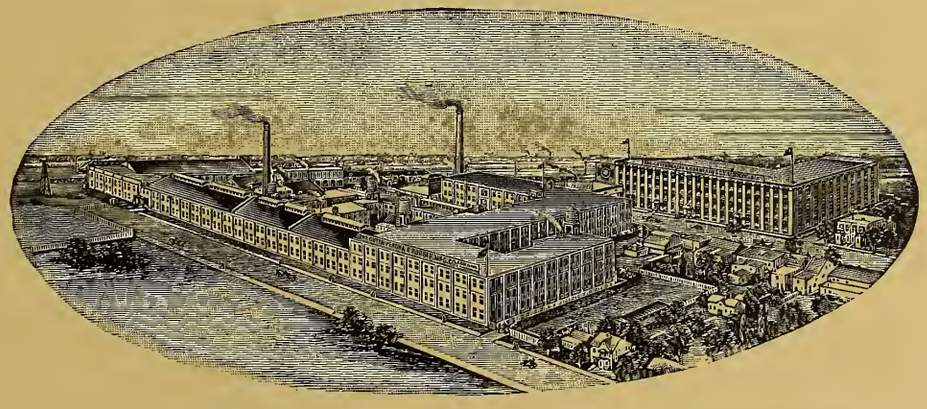
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709 Power Building - Montreal, Que.

HIGH-GRADE RUBBER GOODS

(MADE IN CANADA)

Superior in Quality---Satisfactory in Service



BELTING
For all purposes
PACKINGS
VALVES
TUBING
TIRES
TILING
MATS
MOULDED GOODS

Sole manufacturers of the celebrated "MALTESE CROSS" and "LION" Brands Rubbers. The best fitting, best wearing and most stylish rubber footwear on the market.

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Canadian Consolidated Rubber Co., Limited

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¶ Preach "Made in Canada" and also Practice "Made in Canada"

BUY FOR YOUR OWN PLANT

GOODS THAT ARE "MADE IN CANADA"

¶ Let us quote you on Hose, Belting, Packing, Tires, and your other requirements in Rubber Goods

WRITE OR WIRE OUR NEAREST BRANCH

Canadian Consolidated Rubber Co., Limited

Montreal, P.Q.

28 "Service" Branches Throughout Canada



A 200-lb. man standing on a sheet of cellular board will not compress the corrugations to any perceptible extent.

A TEST YOU CAN TRY FOR YOURSELF

THE illustration shows the resisting power of the Thompson-Norris cellular board for packing purposes. The man in the illustration weighs 200 lbs. Note that there is no perceptible compression. The strength is entirely due to the cellular construction, which makes T. & N. CELLULAR BOARD strong enough to withstand heavy pressure and resilient enough to PREVENT BREAKAGE UNDER SHARP BLOWS AND SEVERE HANDLING IN TRANSIT.

This board is used in the T. & N. packing devices. They protect you from LOSS: your damage bills will be eliminated, shipping expenses brought to a minimum.

THE THOMPSON-NORRIS PACKING METHODS

and safety mailing devices will put your **Shipping Department** on an efficient basis. **Thompson-Norris Packing** saves time, labor, floor space, prevents loss from damaged goods. Saves money on freightage room 20% to 50%, and protects your customers from annoyance, delay and inconvenience.

The Thompson-Norris Co. are the pioneers in the manufacture of corrugated boards and specialties :—35 years' experience enables us to devise methods for your particular requirements which will put your shipping department on a more profitable basis, besides adding to the facilities for a more efficient delivery service to your customers. **It will be worth your while to have us make you free samples for your products. Write us to-day, tell us your special difficulties and we will advise without charge.**

Write Us for Our Booklets and Free Samples. State Size and Nature of Your Product.

The Thompson & Norris Co., of Canada, Limited

NIAGARA FALLS, ONT.

Brooklyn, N.Y.; Boston, Mass.; Brookville, Ind.; London, England; Jülich, Germany

The only reason, Sir, that you will be interested in Dart unions is that they can make money for you

DART union pipe couplings never leak. They stay tight until deliberately loosened, then are as readily made again as when new and without expense or bother. Your engineer knows.

Use has proven dart unions to be truly economical and wholly efficient. Use convinces. Your Jobber sells dart unions, and if you ever find one that is not right in every way, we will give you two new ones free.

DART UNION CO., LIMITED, TORONTO

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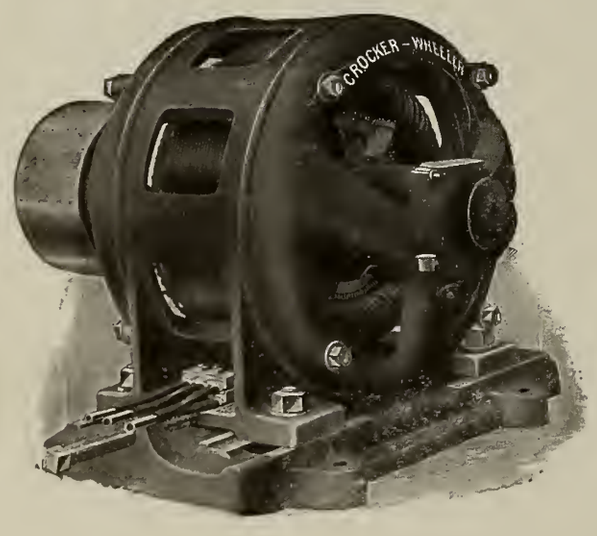
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THE DESIGN OF

CROCKER-WHEELER INDUCTION MOTORS

INCLUDES:

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features; Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works: St. Catharines

District Offices: Montreal, Toronto, Vancouver

1915 ADVERTISING

IF you are practising economy and desire to extend it to your advertising appropriation for 1915, we have a proposition to interest you.

Street Car Advertising

is the most economical and effective form of advertising for the Manufacturer who wants to cover the whole of Canada all the time with an impressive display at reasonable price.

The cost of a campaign in every important city and town from St. John's, Newfoundland, to Winnipeg and beyond, is only a fraction of what you would have to spend in any other medium.

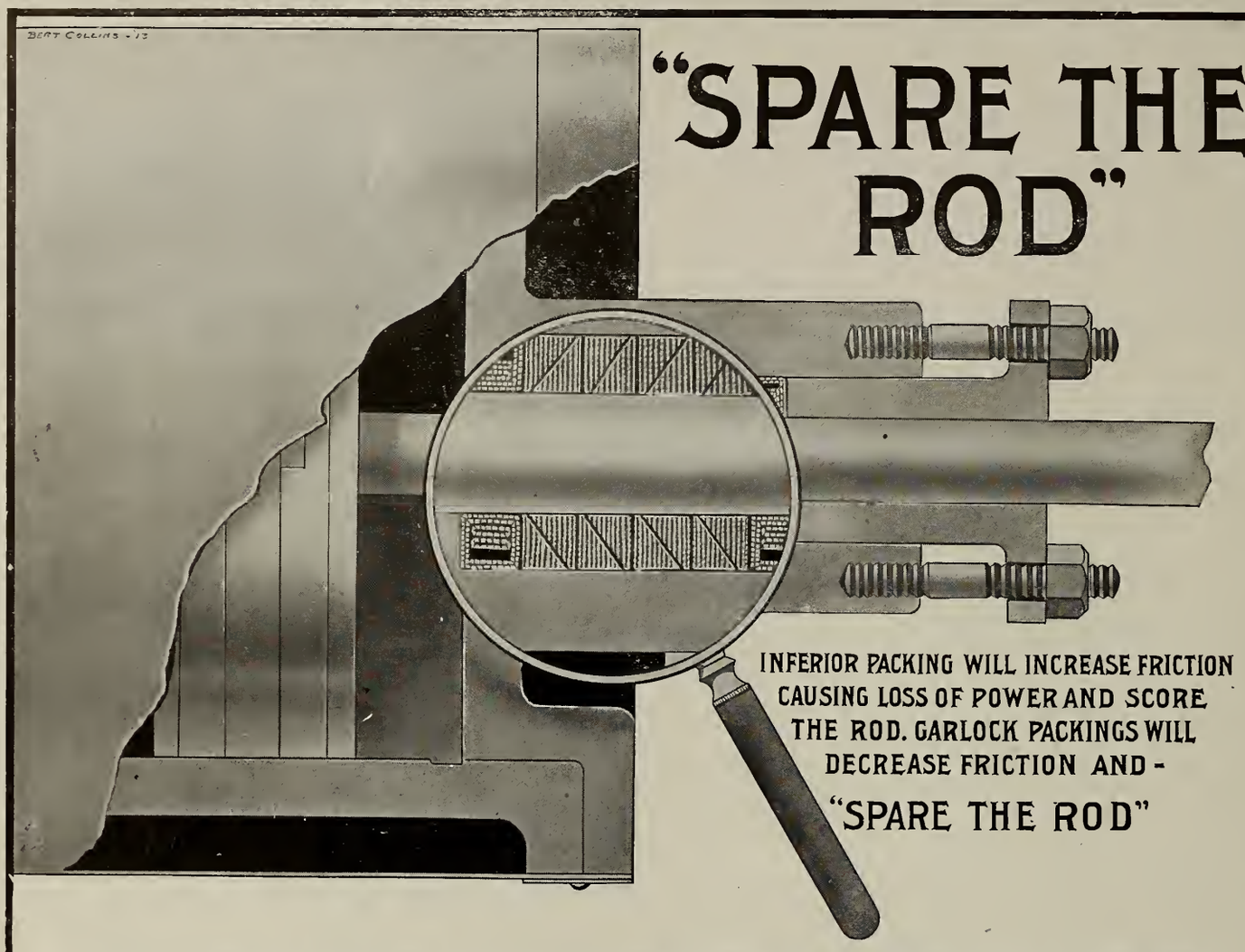
The daily circulation of an advertisement through the Street Cars is 1,735,685, which you purchase at the low cost of One Dollar for each 48,294 passengers carried.

Let us tell you more about it, and show you how you can increase your sales at less cost.

Any of our offices will respond to a request.

THE CANADIAN STREET CAR ADVERTISING COMPANY, LIMITED

TORONTO ∵ MONTREAL ∵ WINNIPEG



The above suggestion for an ad, together with the drawing from which plate was made, was submitted to us by a young engineer, who is studying mechanical illustrating and designing. We are always disposed to encourage our engineer friends who make efforts to improve themselves; therefore, we accepted the idea and drawing for our ad.

GARLOCK PACKINGS are made in over two hundred styles and combinations to meet every known requirement. We will assume entire responsibility in selecting the proper styles or combinations of our packings to work successfully and economically under any stated condition; and if goods are not wholly satisfactory to purchaser we will refund promptly the cost of same. Write for our new catalog.

The Garlock Packing Company, Hamilton, Ont.



BRANCHES:

Calgary, Alberta, 1001A First Street, East
Montreal, Quebec, 348 St. James Street
Toronto, Ontario, 77 Adelaide Street, E.
Winnipeg, Manitoba, Galt Building



THE GEO. B. MEADOWS

Toronto Wire, Iron & Brass Works Co., Limited

MEADOWS BLOCK, WEST WELLINGTON ST., TORONTO, CANADA

MANUFACTURERS
ENGINEERS
ARTISTS
DESIGNERS
ORNAMENTAL IRON &
WIRE WORKERS
STAIR BUILDERS

77

FOR 77 YEARS

THE NAME **MEADOWS**

has been before the people of CANADA as the synonym of Sterling quality in manufactured products and is

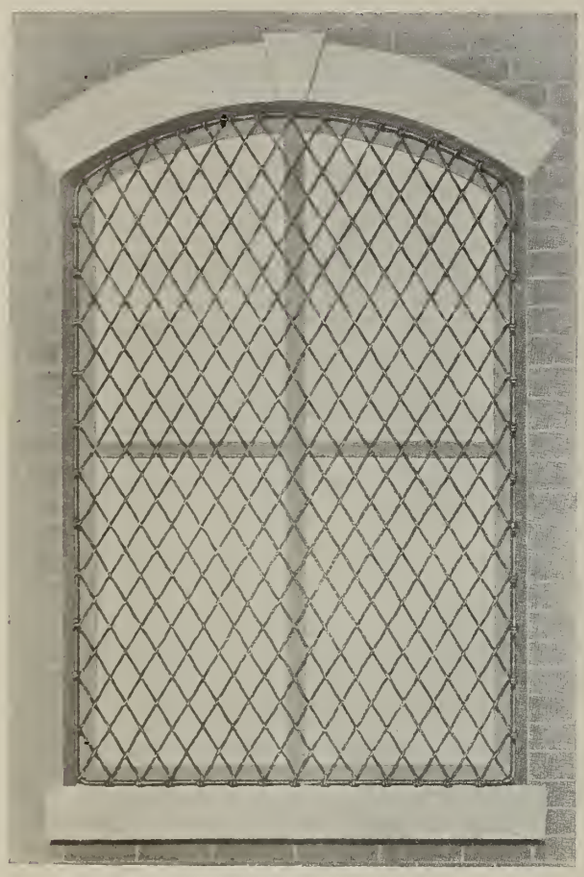
STILL ON THE JOB

Our large factory is equipped with the most modern machinery operated by a family of skilled mechanics.

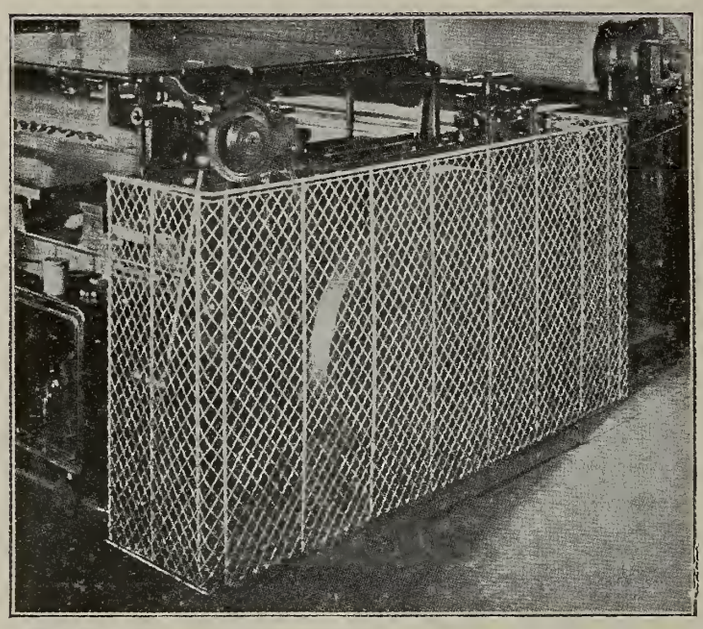
Some of our products will be found on the next and following pages.

THE GEO. B. MEADOWS Toronto Wire, Iron & Brass Works Co., Limited

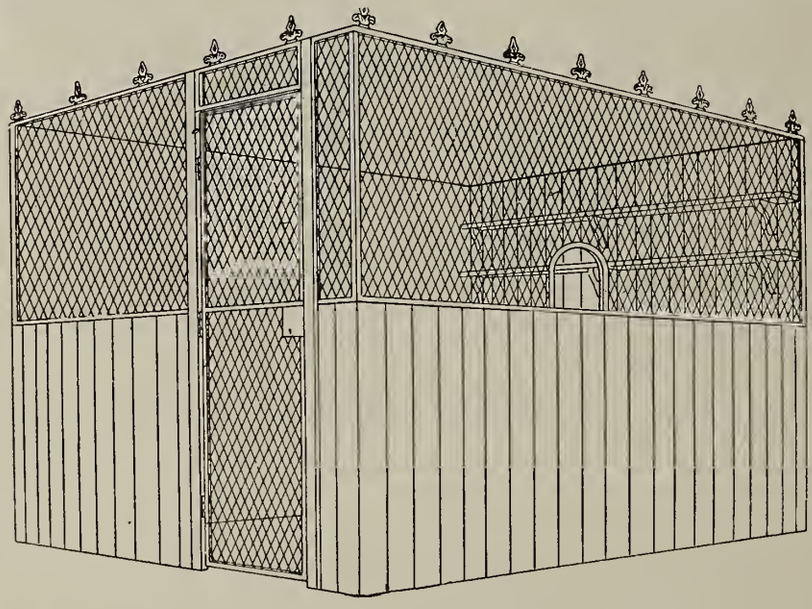
SAFETY FIRST



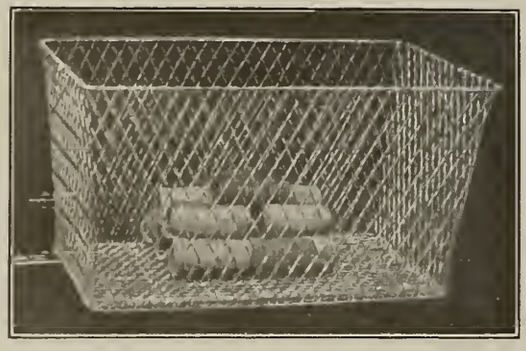
WIRE WINDOW GUARDS
SAVE YOU MONEY.



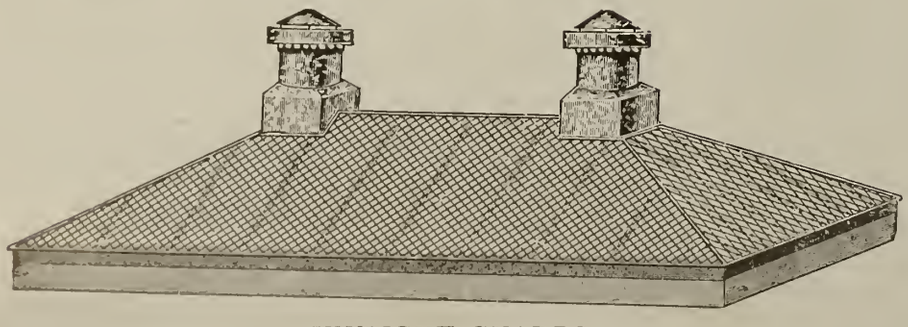
PREVENT ACCIDENTS **BY PROTECTION**



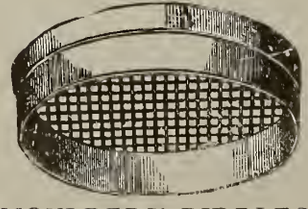
TOOL AND STOCK ROOM PARTITIONS.



MATERIAL BASKETS OF ALL KINDS.

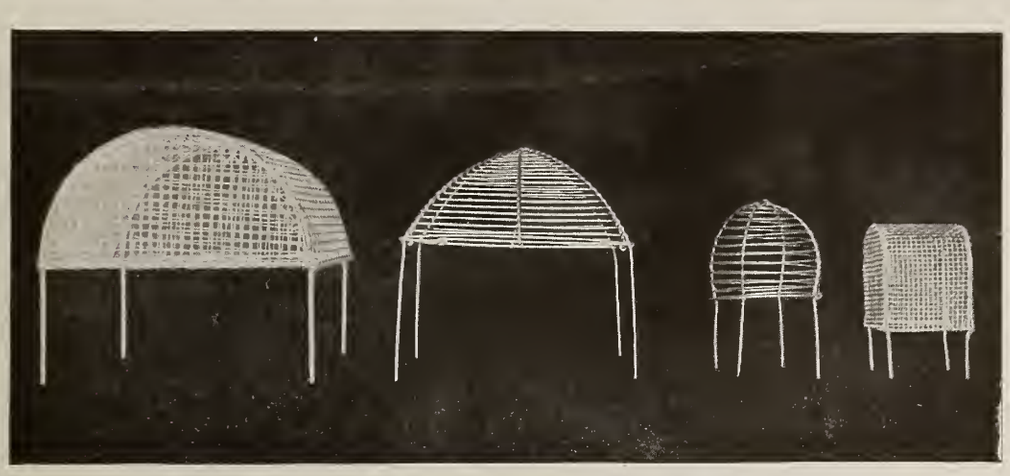


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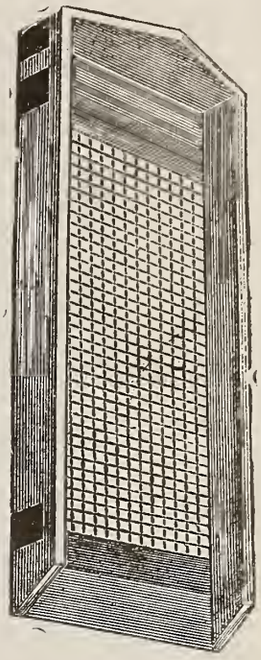


MOULDERS' RIDDLES.

THE GEO. B. MEADOWS Toronto Wire, Iron & Brass Works Co., Limited



DOWNPIPE GUARDS FOR STRAINING SOLID MATTER FROM ROOF WATER.

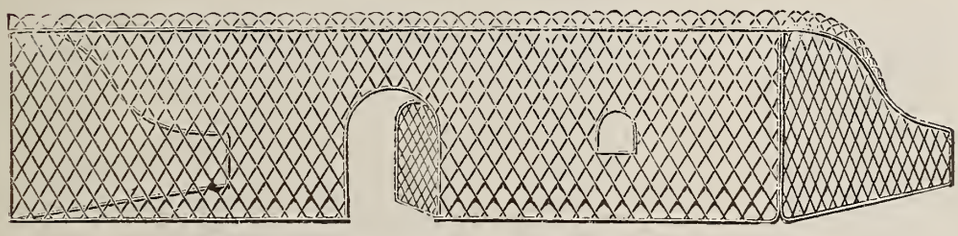


SAND AND COAL SCREENS

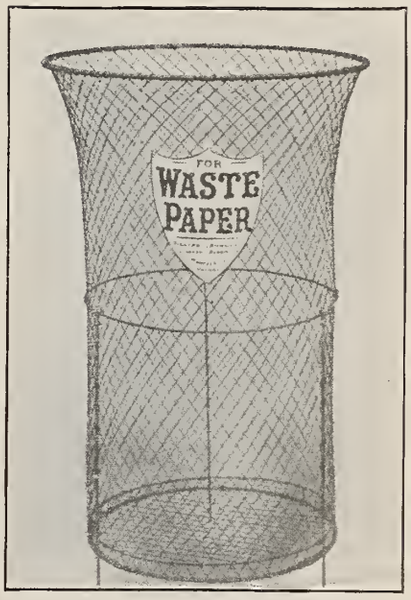


WIRE SIGNS WITH WOOD OR SHEET METAL LETTERS.

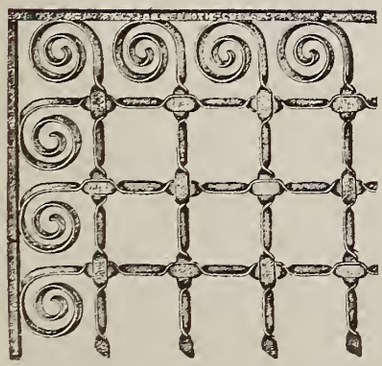
The Ad that is Always There.



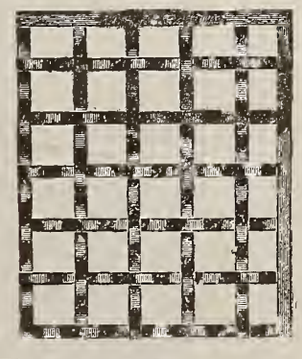
ORNAMENTAL WIRE COUNTER ENCLOSURE.



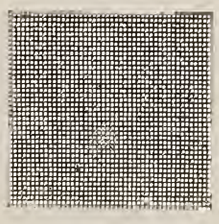
WASTE PAPER BASKETS



Quarter Twist Grille Work with or without Scroll Border, Finished as desired.



Flat Lattice Grille Work.

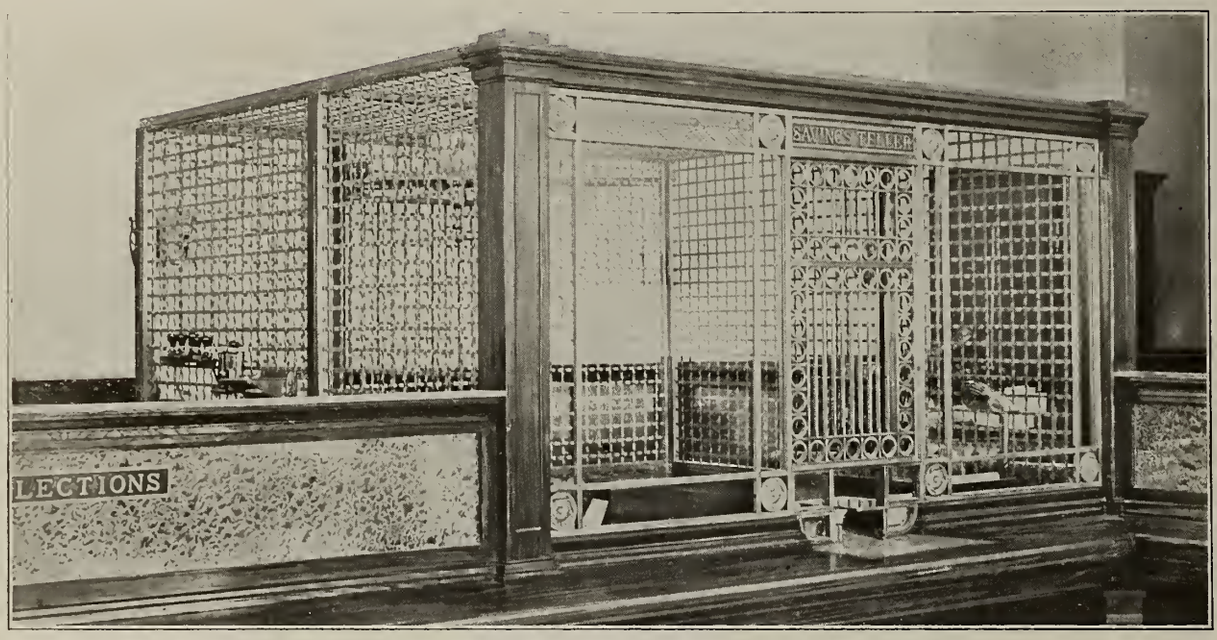


We carry a large stock of Wire Cloth of all grades and sizes.

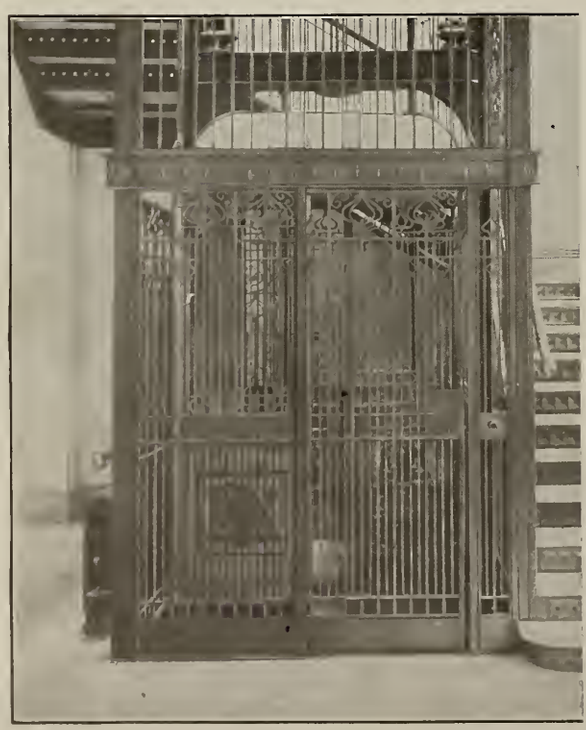
WIRE CLOTH FOR SIEVES, DRYING FLOORS, SMOKE BOXES ETC.

THE GEO. B. MEADOWS Toronto Wire, Iron & Brass Works Co., Limited

Products of Our Architectural Bronze and Iron Department



BRONZE OR ELECTRO-PLATED CASHIER'S CAGES.



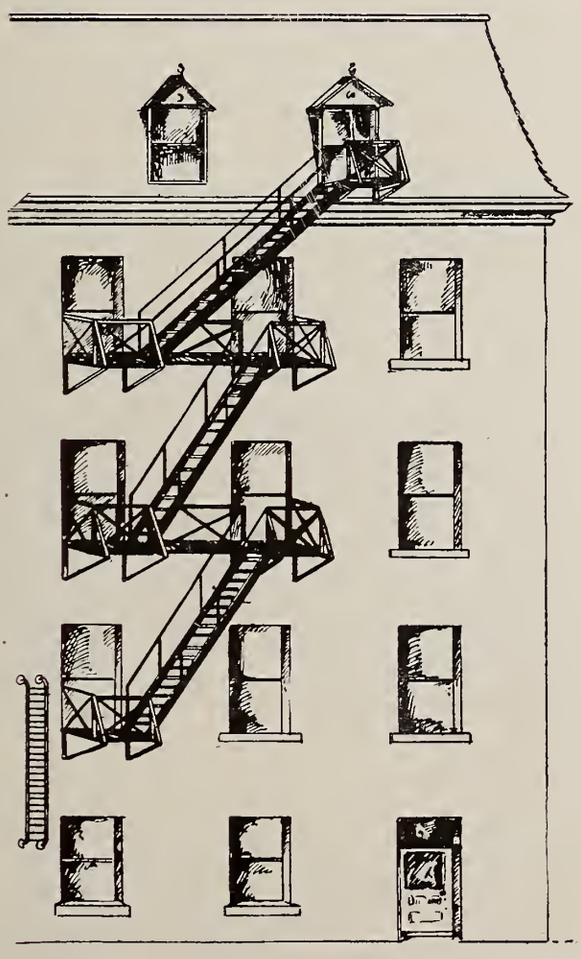
ELEVATOR ENCLOSURES AND STAIRS
ONTARIO PARLIAMENT BUILDINGS.



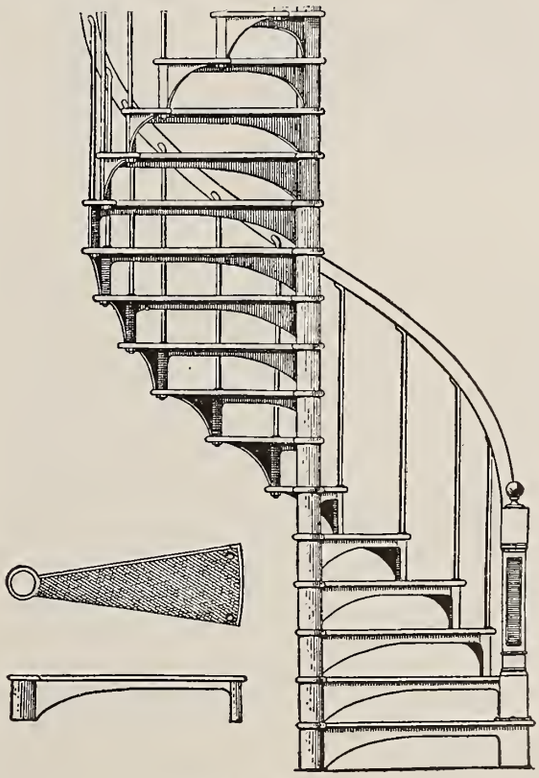
THE GEO. B. MEADOWS Toronto Wire, Iron & Brass Works Co., Limited



MAIN STAIRS, ROYAL ONTARIO MUSEUM.



FIRE ESCAPES.

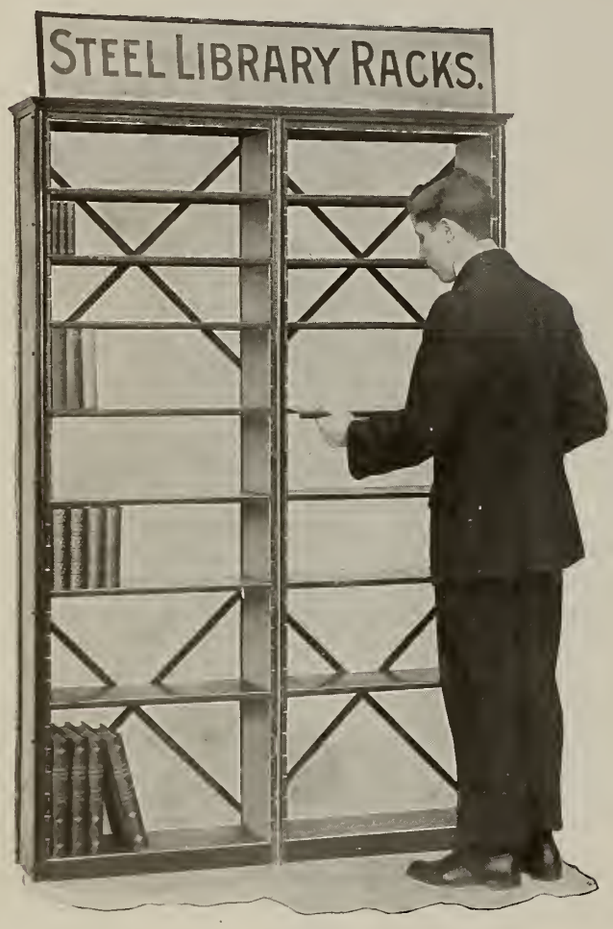


SPIRAL STAIRS.



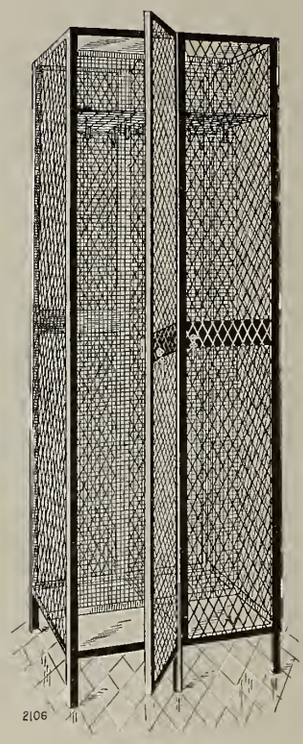
IRON FENCES.

THE GEO. B. MEADOWS Toronto Wire, Iron & Brass Works Co., Limited





CLOTHES LOCKER WITH SHEET STEEL DOOR AND SIDES.



CLOTHES LOCKER WITH WIRE MESH DOOR AND SIDES.



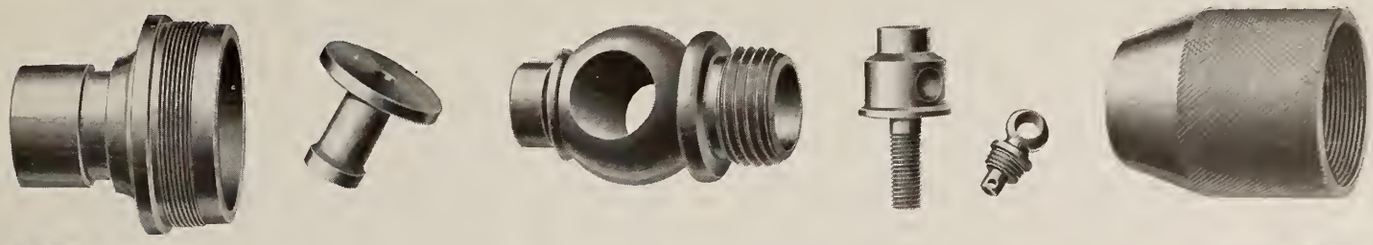
STEEL STOCK SHELVING.



STEEL MATERIAL RACKS.

NOTE—The foregoing six pages constitute our first Journal Advertising Bulletin, and we ask you to specially preserve this number of *Industrial Canada* for future reference. More specific information will be sent immediately on request.

Address : MEADOWS BLOCK, WEST WELLINGTON ST., TORONTO, CAN.



Screw Machine Products That Satisfy

EACH of the twenty-two special screw machine jobs shown, represents a satisfied NAMCO customer; satisfied because he received a *complete* screw cutting service in addition to the actual making of the pieces.

NAMCO Service Offers:

Facilities—Rapid, accurate machinery and long experience in handling all kinds of screw machine work, up to $2\frac{1}{4}$" diameter and $10\frac{1}{2}$" long, everything that can be cut from bars of brass, steel and iron—or that should be.

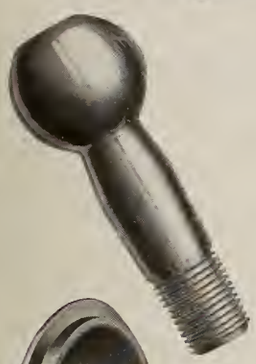
Quality — An accurate, smoothly finished product thoroughly cleaned and securely packed—so uniform that each piece may readily be fitted into the position of any other.

Price and Delivery—Economical shop practice in the cost of parts and prompt shipment give our customers the advantage of attractive prices and good deliveries.

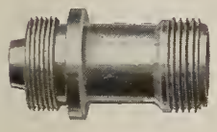
Send your samples or blue prints for quotations.

NAMCO Standard Screws, Nuts and Studs are carried in stock in all popular sizes and styles. Your order will be shipped the day it is received.

Write for "Parts for the Trade" and "Milled Products" to better appreciate NAMCO Service.

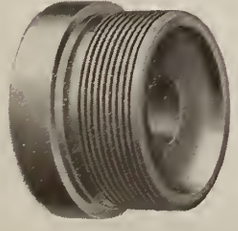


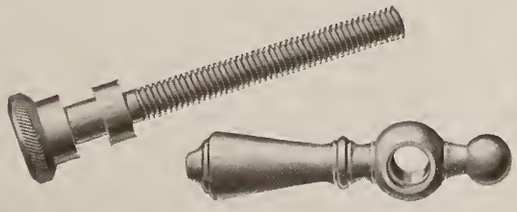




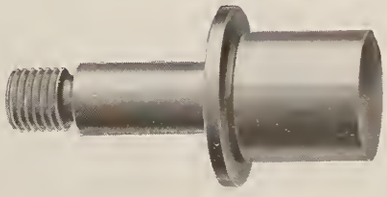
























Montreal P.Q.
IN ST. HENRI AT G.T.R.

Kawneer Store Fronts · MADE · IN · CANADA · Kawneer Store Fronts

KAWNEER · PRODUCTS

· METAL · MOULDINGS ·

· THAT · ARE · SUPERIOR · AND · COST · LESS ·

KAWNEER cold rolled mouldings are produced by the use of Roller Dies; every design requiring a special set. Each set of dies consists of several pairs (upper and lower). One forming operation is performed by each pair. The dies are placed in a rolling machine and through them is passed the metal (copper, brass, bronze, aluminum or steel) which is in very long coils. A perfectly formed moulding is thus produced.

Compare this method with that of producing mouldings by brakes or presses. Each forming die of the press corresponds to one pair of roller dies. But the distinction is :— the roller die operations occur simultaneously—the metal is handled only once. You know how it is with the pressing operation—they occur successively—the metal is handled as many times as there are operations.

· RESULTS · · PRODUCED ·

Mouldings are true in every respect.
All curvatures and angles are uniform and exact.
Mouldings are true to design.
Surfaces are smooth and finished — no rough spots.
Corners are sharp.
Mouldings can be of any length desired.
COST IS LESS.

An opportunity to figure on your requirements will be appreciated—in any event, we want you to learn of the wonderful advantages of mouldings of this nature. Our catalogue—No. 10—will show the possibilities. It's yours if you will write for it.

· WELDED · STEEL · TUBING ·

Our steel tubing is formed by the same process as our metal mouldings. After the forming operation, tubing is passed through the welding machines. It then becomes practically a seamless tube. IT IS PERFECT—EXACT IN GAUGE AND DIMENSIONS. Furthermore, after welding, the steel is homogeneous—no weak spots. Our tubing can be made from hot or cold rolled steel—light or heavy gauge. It is adaptable to all kinds of works which necessitate a perfect tube.

Kawneer Store Fronts

Kawneer
Manufacturing Company
Limited
Francis J. Plym, President

GENERAL OFFICES & FACTORY
GUELPH, ONT.

ITS EFFECT HAS BEEN FELT

IN almost every line of business the effect of the "Made in Canada" Campaign has been very evident. A large number of Manufacturers have not hesitated to state openly that improved conditions in their business are directly attributable to it and some report better total sales than in 1913.

The concerns that are profiting most from the "Made in Canada" sentiment are those whose goods are known to the consumer as being made in this country—those that are trade-marked and advertised—those that the consumer can ask for definitely instead of in a general way.

The retailer, too, gives preference to these lines because they are readily saleable and in demand, the Manufacturers having greased the channels of trade so to speak between his factory and the consumer's home.

To take full advantage of the "Made in Canada" campaign is comparatively easy and inexpensive. Every dollar spent in advertising your goods at the present time is made doubly effective by the collective effort, and the advertising of Canadian Made goods that are as good or better than imported is one of the best ways of making the "Made in Canada" sentiment permanent.

The "Made in Canada" campaign is being handled by us. We have already shown several Manufacturers how to take advantage of the present situation, and we are in a position to advise you as to the best method of advertising and extending your market.

On request we will be glad to make a study of your particular needs and to submit complete plans and estimates.

Address nearest office.

A. McKim Limited

ADVERTISING AGENCY

MONTREAL
Lake of the Woods Building

TORONTO
103 Bay St.

WINNIPEG
Union Bank Building

LONDON, ENG.
4 and 5 Norfolk St., W.C.



Make Sure of Results that Satisfy in Your Varnish Shop

Are you sure that the varnish you use on your product gives your customers the best job of finishing possible for the money?

Are you using a varnish that flows free and easy in all kinds of weather—warm or cold—damp or dry?

Are you using a varnish that does not pit, blister or crack?

If you are not sure that the varnish you are now using is giving you the best results possible—

Ask the "Berry" Salesman

the next time he calls how you can get better finishing results at the same cost.

He is a varnish expert representing a firm that has made varnishes of the highest quality for over half-a-century.

He can tell you the varnish to use for your work that will give you the most satisfactory results.

The advice and counsel of Berry Brothers' staff of varnish experts is at your disposal at all times—no matter what quantity of varnish you may use.

BERRY BROTHERS
(INCORPORATED)
World's Largest Varnish Makers

Established 1858 Walkerville, Ont.

THE ROLLAND PAPER COMPANY LIMITED

MANUFACTURERS OF HIGH GRADE

BOND, LEDGER AND WRITING PAPERS

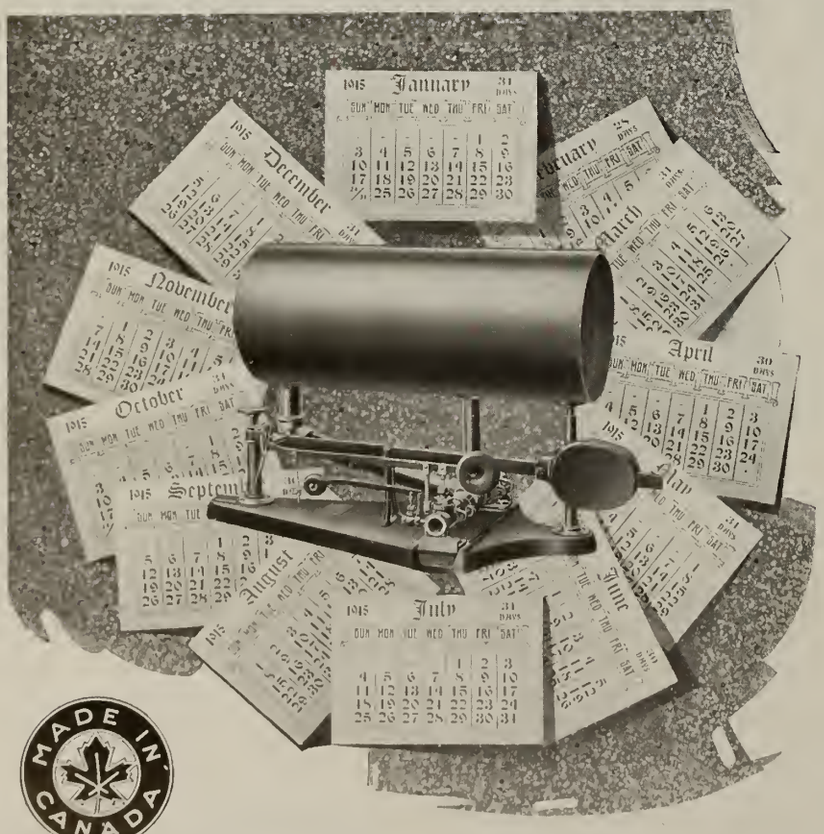
MILLS AT ST. JEROME AND MONT ROLLAND

CABLE ADDRESS: "ROLLAND, MONTREAL" A.B.C. 5TH EDITION

MONTREAL, CANADA JANUARY, 1915

Begin the New Year right by using ROLLAND'S PAPERS

CANADA IS ENTERING AN ERA OF MADE IN CANADA. ¶MANY PRODUCTS NEEDED BY CANADIANS ARE MANUFACTURED IN CANADA. ¶ONE OF THE PRODUCTS RANKING WITH THE BEST THAT THE WORLD PRODUCES IS PAPER. ¶WHY NOT BUY A PAPER THAT HAS PASSED THE EXPERIMENTAL STAGE? EVERY TIME THAT A CANADIAN BUYS PAPER MADE IN CANADA, HE STRENGTHENS THE EMPIRE BY KEEPING HIS MONEY CIRCULATING WITHIN ITS LIMITS.



Automatic Feeding of Your Boilers the Whole Year 'Round with Water Previously Wasted is One Benefit Obtained Through an Installation of the

Morehead
Back to Boiler
SYSTEM

CONDENSATION! Are you draining it out of your steam apparatus and returning it to the boiler as feed water? The "Morehead System" will do it for you—will create a profit out of this previously wasted *hot* water by feeding it *direct* to your boilers *at its initial temperature.* Figure the saving in time, fuel and labor. It's real economy, isn't it? And you can *prove* every statement we make in your own plant *any time.* Write us *now* for complete information. You'll find it pays.

CANADIAN MOREHEAD MANUFACTURING CO. WOODSTOCK, ONT.

267

SERVICE
For
Manufacturers

There come up in all businesses questions regarding which no one therein feels qualified to answer with finality.

Such questions often concern one or more of the items listed below, and we would like you to know that we maintain a department whose duty it is to suggest, to advise, to plan, ways and means best suited for the contemplated need or the change in arrangement, or the enlargement or the repair of the item in question.

This, without obligation on your part. We believe the rendering of satisfactory solutions of manufacturers' problems in these lines will often mean orders we would perhaps not otherwise get. But we will and do cheerfully, gladly, answer questions and submit ideas without any assurance whatever that we will get the work.

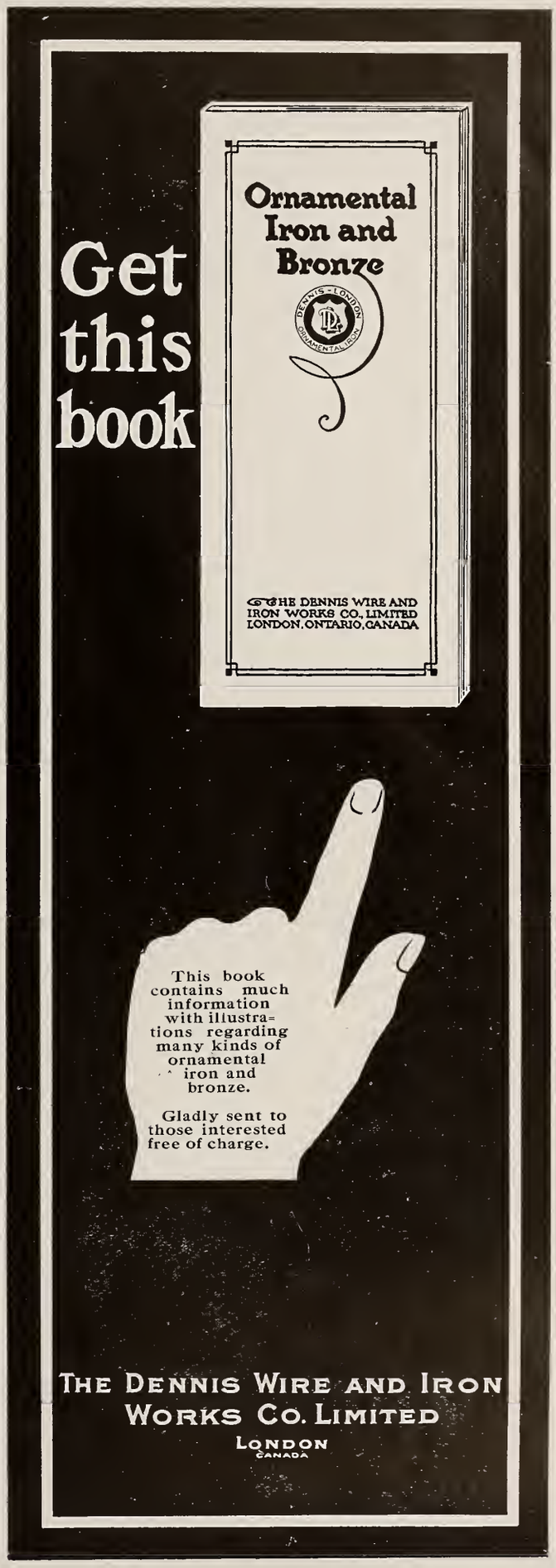
It's "Service," and we're big enough and broad enough to know that a certain amount of service will produce a certain amount of good-will, that intangible something that has been the basis of our success as it has been that of many other firms.

Now, here's the list. Just write us anything you like. Get started. Perhaps the best, first thing to do is to send for our new booklet shown opposite, mentioning if you have any particular item in mind.

Under this trade mark we make and install:
Iron Stairs, Fire Escapes, Balconies, Marquises, Elevator Enclosures, Elevator Cabs, Electric Lamp Standards and Brackets, Iron, Brass and Bronze Railings, Wickets, Grilles, Metal Store Fronts, Steel Window Sash, Iron Fencing and Gates, Wire Guards and Screens, Wire Signs, Brass and Bronze Tablets.

DENNISTEEL LONDON - CANADA

Under this trade mark we make and install:
Steel Office Equipment, Steel Wardrobe Lockers, Steel Material Lockers, Steel Shelving, Steel Bins, Steel Tote and Assembler's Boxes, Steel Factory Stools, Steel and Wire Partitions.



HERE IS TO 1915

Yes, 1914 has been a tough one! However, cheer up! there is a good time coming. We presume that we have had our share of what Canadian Manufacturers had to buy and we are thankful for that.

Now For 1915

We have a Tremendous Stock of

SHAFTING, HANGERS and PULLEYS

both in **Toronto** and **Montreal**

And we want our many good friends from coast to coast to patronize us. We are a Canadian Corporation maufacturing in Canada.

Send for Our Catalogue

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LIMITED

Toronto **Montreal**

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Auckland New Zealand
34 FORT STREET

Christchurch New Zealand
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LIMITED

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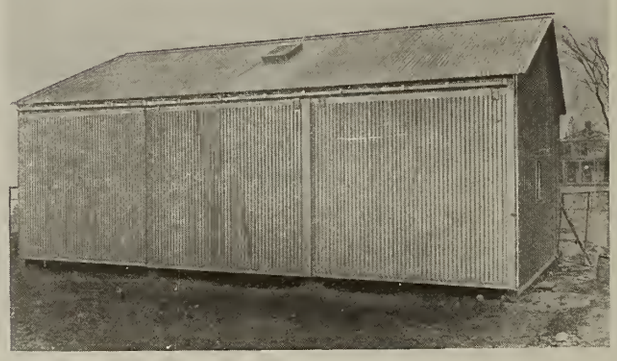
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TANKS
AND
TOWERS
FOR
Sprinkler Systems
TOWN WATER SUPPLY
ETC., ETC

PUMPS
CONCRETE MIXERS
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Write, if interested

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Heavy steel frame covered with Acorn quality corrugated iron.

All cut and ready to put together at our factory. Two men can erect a building in a few hours' time.

If you need fireproof storage space, send for our booklet "Ready-made Buildings."

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FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. *Write for prices to*

H. V. ANDREWS, Canadian Representative **32 Church Street, Toronto, Canada**



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NOTICE

To Manufacturers, Dealers and Users of Steam Boilers.

All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.

HON. FINLEY G. MACDIARMID, Minister of Public Works. D. M. MEDCALF, Chief Inspector of Steam Boilers.



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Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

Distilled and Bottled by

HIRAM WALKER & SONS
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Walkerville, Canada

LONDON CHICAGO NEW YORK MEXICO CITY VICTORIA, B.C.

STEEL CASTINGS

From MALLEABLE STEEL, MANGANESE STEEL, CROME STEEL, Etc.

STEEL PROPELLER WHEELS
TURBINE WATER WHEELS, MILL GEARING, Etc.

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OWEN SOUND - - ONT.

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Ask Your Jobber for

WROUGHT PIPE BLACK AND GALVANIZED 1/8 TO 4 INCH

Thoroughly inspected and tested
to 600 lbs. pressure and branded.

CT Brand

Also BOLTS, NUTS, RIVETS—All Kinds

SELLING AGENTS:

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BAR IRON AND STEEL

Colonial Wire Mfg. Co., Limited
WIRES, WIRE NAILS, WOOD SCREWS, ETC.

WORKS: LACHINE CANAL MONTREAL, CANADA

"Get Jones on the Phone"

A Factory Telephone System, worked automatically without the trouble and expense of a central operator, will keep you in close touch with "Jones," and with every other man in your factory, from the Superintendent to the Watchman.



A SWITCHBOARD WITHOUT AN OPERATOR

PRESTO-PHONE

gives you a factory telephone service that has the merits of simplicity, efficiency and economy. By pressing a lever you immediately get a connection with the department you wish.

Time is Money

YOU save money in your own time; you save money in the time of your employees; and you save money in the better service you give your customers.

Your own time? Yes. If you can keep in touch from your office with every man in your factory, every Departmental Head, every piece of work, you save the time that it would take to visit every corner of your building.

How many minutes a day are wasted in this way or in having a foreman come to you to report on his work? While he is doing that he is unproductive. And his workmen have not his supervision. An important matter, is it not?

Increases Efficiency

A house Telephone system preserves your organization. Every man is in his place. Every man is doing the work allotted to him.

And the central control is perfect. You at your desk have a closer supervision over your factory than the superintendent of the small shop has over his.

No Running Expenses

Our automatic system has no expense after the cost — a very moderate cost — of installation. There is no central operator. A child can use it.

SEND FOR BOOKLET ON AUTOMATIC FACTORY TELEPHONES

You will be interested.

We manufacture all kinds of Telephone Apparatus, Manual and Automatic.

The Canadian Independent Telephone Co., Limited

DUNCAN ST., TORONTO

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EASTERN
AVENUE



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The Largest Patent Leather Manufacturers in the British Empire

A. R. CLARKE & CO., LIMITED

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MADE IN CANADA

Canadian Hart Wheels

CUT FASTER LAST LONGER

Than any other wheels on the market

Tell us the service you want performed and we will supply you with an abraser that will save you time, money and worry.

Send for one of our catalogues and tell us your troubles. We do the rest. :: :: :: ::

CANADIAN HART WHEELS LIMITED

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ESTABLISHED 1850.

DID YOU EVER NOTICE

that jarring, grinding noise in your machine shop caused by the metal gears?

Wouldn't you like to stop that noise? You can do it by using

NEW PROCESS GEARS
RAWHIDE PINIONS

They last indefinitely too.

Ask us about it.

R. GARDNER & SON, LIMITED

Nazareth, Brennan and Dalhousie Streets

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JUTE AND COTTON BAGS

Of Any Description
Think of the

Smart-Woods, Limited

HEADQUARTERS FOR

TENTS, AWNINGS, FLAGS
TARPAULINS, LUMBERMEN'S and
CONTRACTORS' SUPPLIES
and CLOTHING

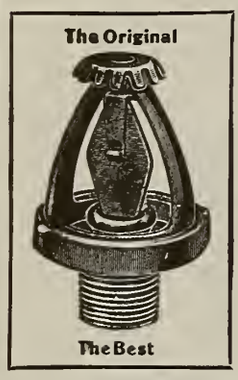
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Automatic Fire Sprinkler System

throughout your Factory, Store or Warehouse.

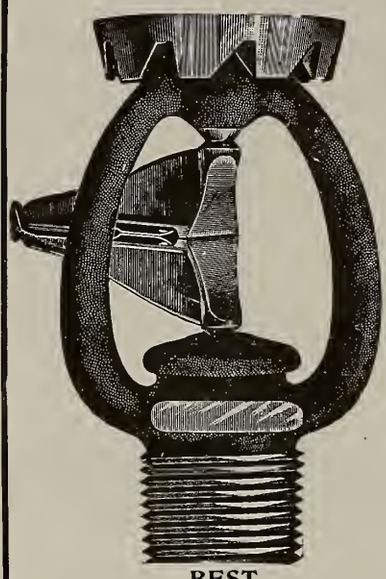


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Correspondence Solicited

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Limited

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Esty : : Automatic Fire : : Sprinkler :

It will cut your insurance premium in half and protect you against loss by fire. Write for particulars

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Business Office and Works: TRAIL, BRITISH COLUMBIA

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ENGINEERS AND CONTRACTORS

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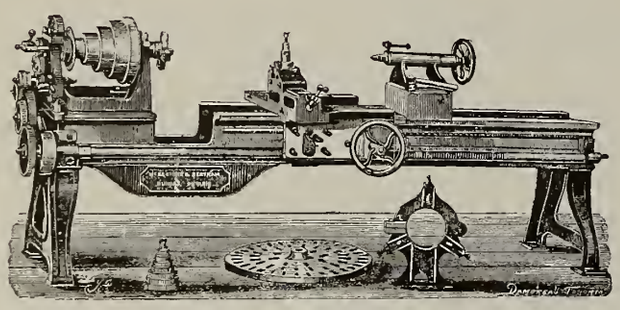
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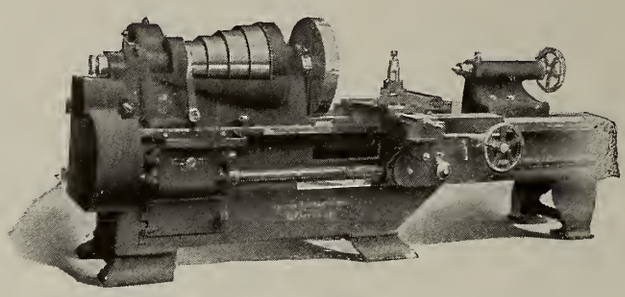
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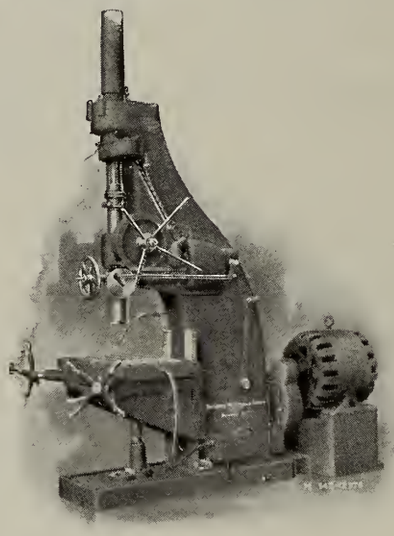
26" x 42" GAP LATHE—1914

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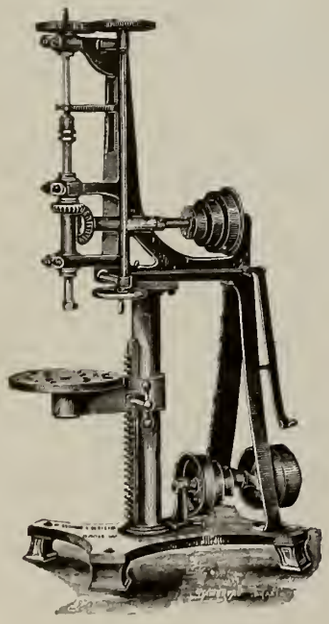
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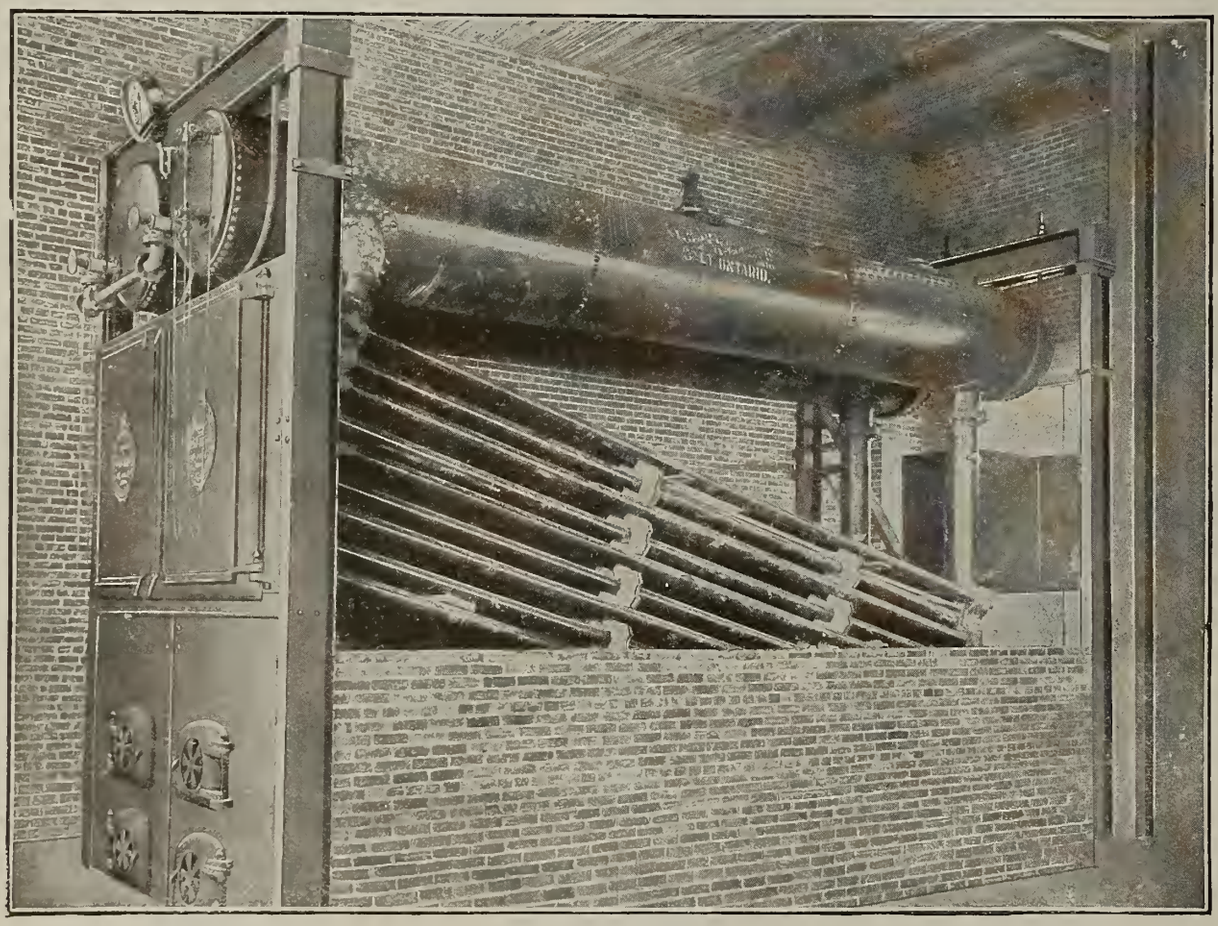


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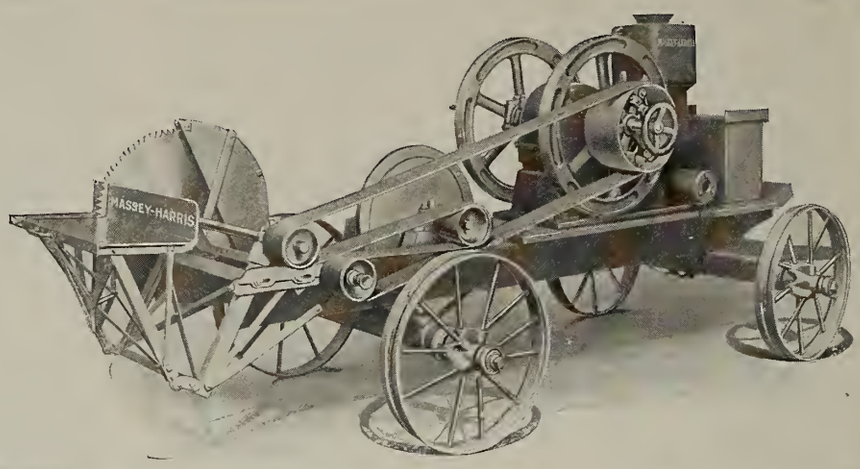
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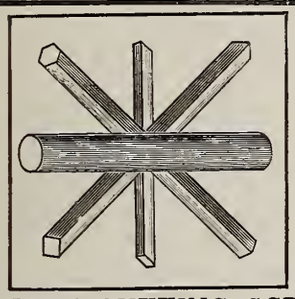
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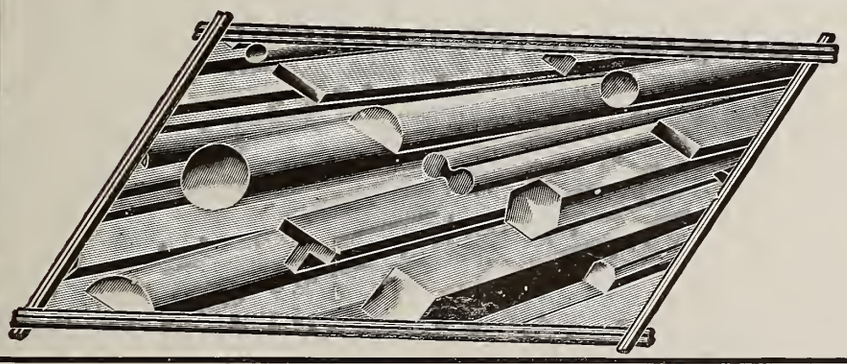
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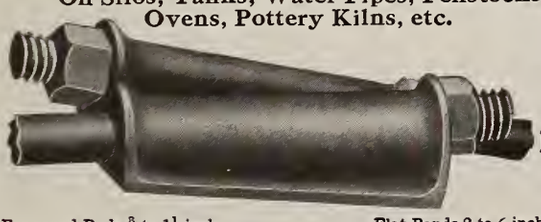
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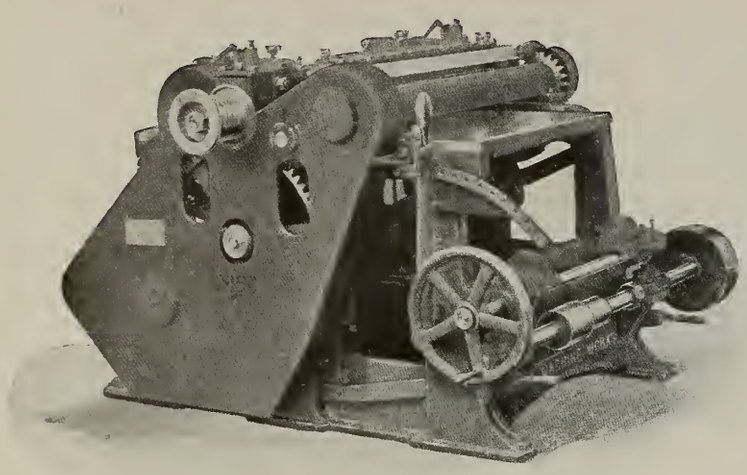
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Everything for the Bath Room.

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Largest Manufacturers of Woodworking Machinery in the World

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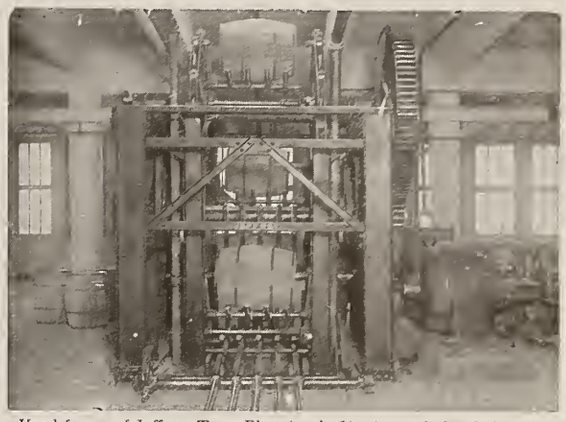
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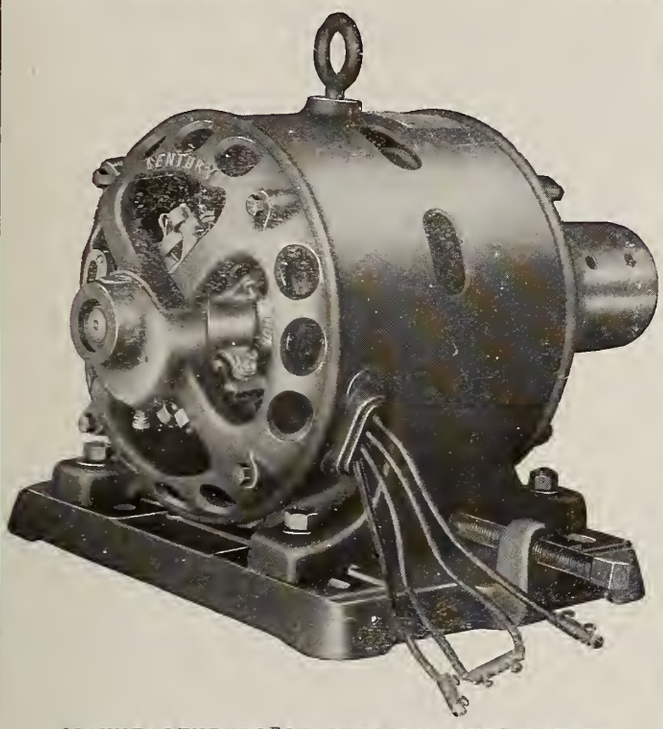
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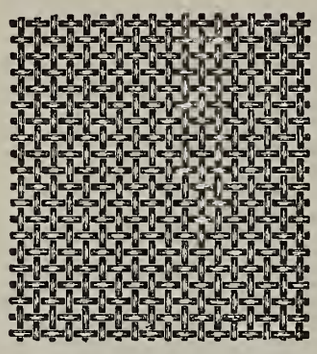
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There is no kind of Wire Fabric required in the production of any machine or manufactured article that we cannot furnish.

We also manufacture:—

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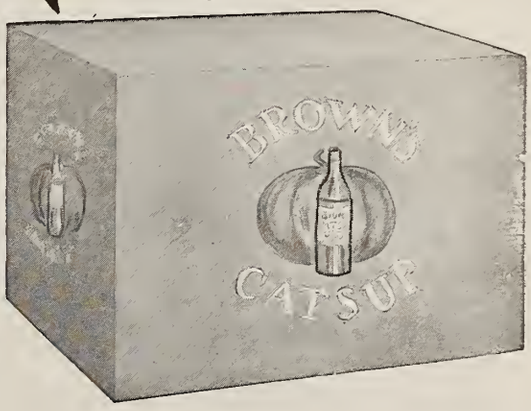
Do you want it to reach your customer or agent in a battered, splintered case, bruised and damaged—do you want your customer to get that kind of first impression? Do you like to be always negotiating over the replacement of damaged goods and return freight charges?

H. & D. Corrugated Board Fibre Boxes

Or do you want your product to arrive in a condition that will draw further trade instead of repulsing it? Clean and fresh—just as attractive as when it was packed? Don't you want your printed label on the package to be fresh and readable and the consignee's name perfectly legible and intelligible?



will protect your shipment against water, damp, damage—and the goods will be removed by your customer in just as good condition as when packed. Wood has become so expensive that it is not economy to use it for packing cases. But even if H. & D. Corrugated Fibre Board Boxes were not cheaper, they would still be vastly superior for any package weighing less than 100 pounds. Although they cost less and are a great deal lighter, they are five times as strong and have greater carrying power. The cellular construction of the board makes the cases so resilient that they will stand most extraordinary rough handling and abuse.



Trim Down Your Freight Bills

Save on each shipment the unnecessary expense occasioned by the greater weight of wood. H. & D. Corrugated Fibre Board Boxes will help you to make this saving and will put the shipment into your customer's place of business in better condition. Not only do the contents of the case go better in H. & D. Corrugated Fibre Boxes, but the box itself with its attractive monogram in colors, retains its freshness and attractive appearance when a wood box would be cracked and battered and not fit to be receipted for at the customer end.

Write us what you ship and ask for our free booklet "How to Pack It." We want to prove to you that you need H. & D. Corrugated Fibre Board Boxes in your business.

Let Us Design a Sample For Your Product

No matter what you have for shipment, we can design a better, cheaper, more satisfactory packing case than you are now using — a case that will save you 10 p.c. to 87 p.c. in freight charges — 25 p.c. to 50 p.c. in packers' time — 90 p.c. of your storage space. A saving in freight charges because the H. & D. Corrugated Fibre Board Cases are so much lighter than wood. A saving in packers' time because an H. & D. Case can be set up and sealed in one-half the time a wood box can be procured and nailed. A saving in storage space because a thousand H. & D. Cases can be stored in the space ten of your wood cases now occupy. We will gladly design a specimen case for you to specially fit your needs—that you may examine and test and prove. This will cost you nothing —involve no obligation. It will illustrate not only the economy and the efficiency of H. & D. Cases, but the better advertising value.



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The Edward Partington Pulp and Paper Co.

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Why Pay Freight on Wooden Boxes?

MARTIN

Corrugated Shipping Cases

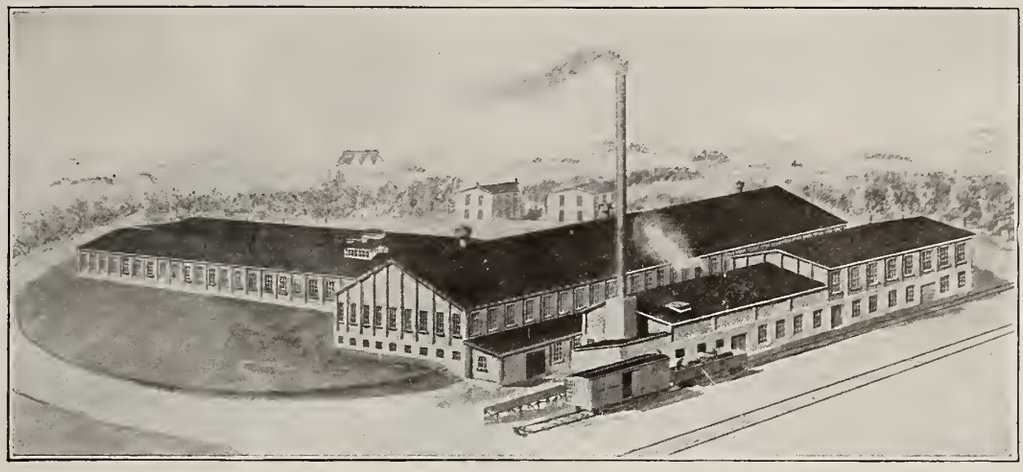
Are made from special fibre stock, and are constructed so as to protect the goods from damage or breakage. At the same time saves 75 p.c. of weight of wooden cases.

These boxes comply with the freight classification and are accepted at the same rate as goods packed in wooden boxes. Can be used for shipping by freight or express any goods in reasonable weight package.

Write for catalogue and sample. Give inside dimensions and weight of contents.

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The Largest and Best Equipped Mill in Canada for the Coating of Paper.

"Maple Leaf" "Beaver" "C. A." Coated

Insist on these Brands being used in your Catalogue

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LARGE VARIETY BUILDING PAPERS

Can be shipped from stock on hand at Merritton.—Grey, Blue, White, Brown, also Hawkesbury Impervious Sheathing

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DOMINION PAPER BOX Co. LIMITED.
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MANUFACTURERS OF PAPER BOXES OF EVERY DESCRIPTION.



THE GRASSELLI CHEMICAL CO.

LIMITED

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WORKS
HAMILTON, ONT.

HIGH GRADE HEAVY CHEMICALS

Sulphuric, Muriatic and Nitric Acids, and Aqua Ammonia, both Commercial and Chemically Pure; Mixed Acid, Acetic Acid, Glauber Salt, Salt Cake, Silicate of Soda, Caustic Soda, Soda Ash, Hypo-Sulphite of Soda, Bi-Sulphite of Soda, Sulphide of Soda, Calcined Magnesite, Chloride of Magnesium, etc., etc. Grasselli Arsenate of Lead and Lime Sulphur Solution.

We manufacture from the Log and Creosote under Pressure to any desired specification

CREOSOTED WOOD BLOCK PAVING CREOSOTED BRIDGE AND MINING TIMBERS, CREOSOTED FIR PILING

In our New Plant we have adopted the most Scientific and Modern Methods as regards the Treatment of Timber, and will be glad to furnish Quotations, guaranteeing Prompt and Satisfactory Delivery.

THE DOMINION CREOSOTING COMPANY, Limited, Vancouver, B.C.

SUCCESSORS TO THE DOMINION CARBOLINEUM WORKS, LIMITED

COTTON & WOOL WASTE

Made in Canada by

The Dominion Waste Mfg. Co. Limited, Toronto

BRANDS:

Cotton Polishing: Cream, White.

White Cotton Wiping: XXX Extra, X Grand, XLCR, X Empire, X Press.

Colored Cotton Wiping: Fancy, Lion, Standard, Popular, Keen.

Wool Packing: Arrow, Axle, Anvil, Anchor.

Washed Cotton Wipers: Select White, Light Colored, Dark Colored.

Packed in Compressed Bales
500, 200, 100, 50, 25, 10, 5 lbs.

No liquid dope or clay used in any of our brands—nothing but threads.

SOLE SELLING AGENTS

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Manufacturers and Jobbers

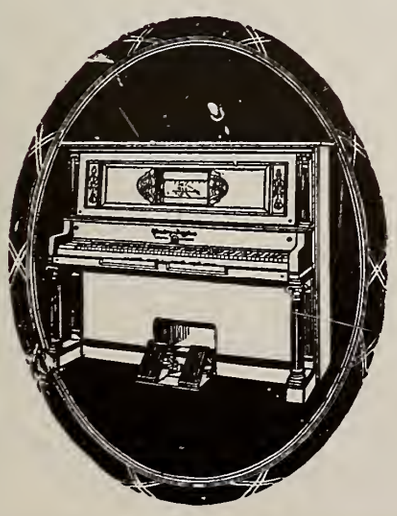
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Player-Pianos



A GOURLAY-ANGELUS provides ANYONE with the ability to play ANY music artistically.

In the opportunity for recreation thus afforded, many busy men find enjoyment hitherto undreamed of, as well as a complete rest from the business worries and cares of the day. If you find it hard to leave these cares behind you when you go home, depend upon it, a Gourlay-Angelus will make you forget them.

One Toronto manufacturer tells of this pleasure in a Gourlay-Angelus as follows:—"I have always been glad I purchased the Gourlay-Angelus. The longer I have it the more I enjoy it and the more I use it."

Write for Catalogue and Prices

GOURLAY, WINTER & LEEMING,
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ARE YOUR STEAM PIPES INSULATED?

IF NOT YOU ARE BURNING MONEY

A **GOOD** Covering pays for itself in one Season, and is a revenue producer indefinitely.
The Best is the Cheapest. ☞**WE HAVE IT.**

EUREKA MINERAL WOOL & ASBESTOS COMPANY

118 ADELAIDE STREET WEST, TORONTO, ONTARIO

NOTICE

to

Stationary Engineers

Everyone operating a Stationary steam plant of 50 h.p. or over in the Province of Ontario must hold a Certificate from the Stationary Engineers' Board. Anyone operating such a plant without a Certificate is liable to the penalties set forth in the Stationary Engineers' Act.

HON. JAS. S. DUFF, Minister of Agriculture
W. C. McGHIE, Chairman of the Board

NOTICE

The following are the Factory Inspectors for the Province of Ontario:

JAS. T. BURKE, Chief Inspector, Parliament Buildings, Toronto.
H. A. CLARK, 432 Woodman Avenue, London.
A. W. HOLMES, Parliament Buildings, Toronto.
ROBERT HUNGERFORD, Parliament Buildings, Toronto.
MISS MARGARET CARLYLE, Parliament Buildings, Toronto.
MRS. A. BROWN, Parliament Buildings, Toronto.
THOMAS KEILTX, 25 Russell Avenue, Ottawa.
S. J. MALLION, 214 Wellington Street, Stratford.
FRED KELLOND, 157 Wellington Street South, Hamilton.
H. J. TUTT, 13 Enderby Road East, Toronto.

Persons having business with any of the Inspectors will find them at the above address. **HON. JAS. S. DUFF**, Minister of Agriculture. Phone Main 5800.

BROWN BROS., LIMITED



Manufacturers of

ACCOUNT BOOKS

Loose Leaf Ledgers, Binders, etc.
Leather Goods, Diaries, Paper, Stationery, Office Supplies

OFFICE AND FACTORY - - TORONTO
SIMCOE, PEARL AND ADELAIDE STS.

The Montreal Lithographing Company, Limited

High Class Lithographers and Designers of

CALENDARS SHOW CARDS
LABELS OFFICE STATIONERY
ADVERTISING PLAYING CARDS

Office and Works
ONTARIO STREET & PAPINEAU AVENUE
MONTREAL, CANADA

SOUTHAM PRESS LIMITED

"Direct by Mail" Advertising

DIRECT-by-Mail Advertising is conceded by experts to be the most effective result producing business getter at the command of the enterprising business man.

And Direct-by-Mail Advertising (the best kind) is printed matter—plus good workmanship—plus brains. It comprises catalogs—booklets—brochures—circulars—hangers—calendars—poster stamps—house organs—business stationery and in fact every printed thing.

If you want results stop buying "just printing." Tell us what result you want to accomplish and let us suggest for you a "direct-by-mail" advertising campaign.

We will do the whole thing from the conception of the idea to the mailing (if you wish).

Ask us for samples of some things we have done.



Headquarters for tags—gummed stickers—seals—tickets and labels.

Southam Press Limited

Montreal :: Toronto

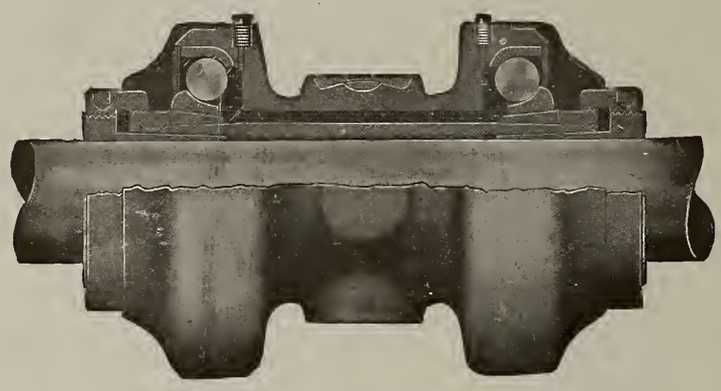
YOU CAN INCREASE YOUR POWER WITHOUT INCREASING THE SIZE OF YOUR POWER PLANT

Your present line shafting is consuming from 15% to 60% of your power.

The Chapman Double Ball Bearing will save this waste and turn it into productive energy.

They will also reduce your oiling and attention to a minimum.

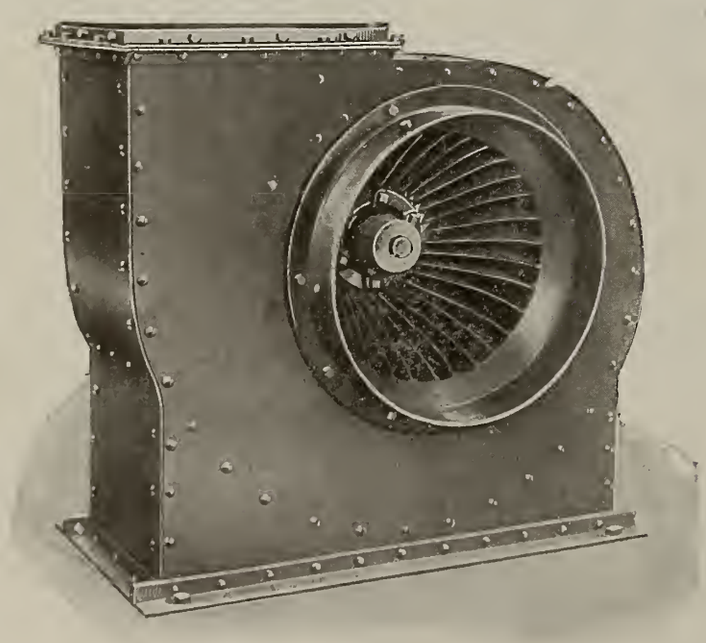
They fit any adjustable hanger and the change can be made with but little delay to you.



In use in over 2,000 Canadian Factories

The Chapman Double Ball Bearing Company
OF CANADA LIMITED

339-351 Sorauren Avenue ∴ ∴ Toronto, Canada



Keith Fans

For Heating and Ventilating

When it comes to a question of Heating and Ventilating the Factory, Church, School or Public Building, it is imperative that you should select the best and most approved system. The **"Keith" Fan** is specially distinguished for giving greater volume with less power than any other Fan made. Get our Keith Fan Catalogue No. 55 and judge for yourself.

SHELDONS LIMITED - GALT, ONTARIO

Toronto Office—609 KENT BUILDING

AGENTS

Messrs. ROSS & GREIG, 412 St. James Street, Montreal, Que.
Messrs. WALKER'S, LIMITED, 259-261 Stanley Street, Winnipeg, Man.
Messrs. GORMAN, CLANCEY & GRINDLEY, LIMITED, Calgary and Edmonton, Alta.
Messrs. ROBERT HAMILTON & CO., LIMITED, Bank of Ottawa Building, Vancouver, B.C.

"MADE IN CANADA"

Flowers
Made in Canada

3-Color Half-tones
Made in Canada

Printed in Canada

on Paper
Made in Canada



What better evidence is required to prove that Canadian workmen can produce the Highest Grade Work

Illustrations in color are essential for effective advertising—

BRIGDENS LIMITED PRODUCE THE BEST

ARTISTS - ENGRAVERS - PRINTERS

"THE HOUSE OF QUALITY AND SERVICE"

160-164 West Richmond Street,
Toronto, Ont.

Cor. Notre Dame and Langside Ave.,
Winnipeg, Man.

"MADE IN CANADA"

THE CANADIAN MANUFACTURERS ASSOCIATION is spending $25,000 in educating the people of Canada to buying Made-in-Canada goods.

The newspapers from one end of Canada to the other are urging the same principle.

People want to buy Made-in-Canada goods.

But are you, the individual Canadian manufacturer, letting the public know that your goods are Made-in-Canada? Are you making them familiar with your brands, your trade-marks, the design and appearance of your products?

That is done by keeping them supplied with catalogues and advertising literature.

BRIGDENS LIMITED

have, in every department, the latest equipment for producing efficiently and expeditiously all classes of Advertising matter.

TRY THEM!



BRIGDENS LIMITED

ARTISTS · ENGRAVERS · PRINTERS

"The House of Quality and Service"

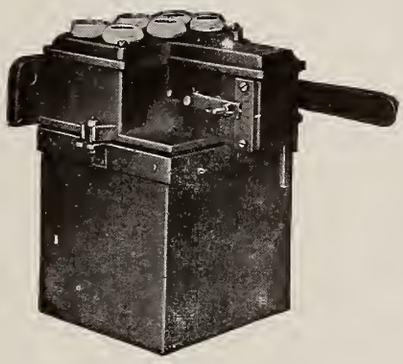
160-164 West Richmond Street,
Toronto, Ont.

Cor. Notre Dame and Langside Ave.,
Winnipeg, Man.

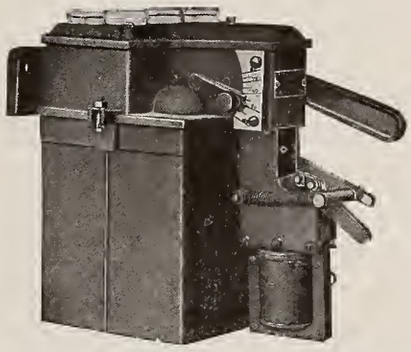
SEE PREVIOUS PAGE

A simple, reliable and inexpensive Oil Circuit Breaker for general industrial use.

Westinghouse
Type H Oil Circuit Breaker



Three-Pole Type H Oil Circuit Breaker, Plain Overload Trip, Wall Mounting.



Three-Pole Type H Oil Circuit Breaker, Full Automatic Overload, Wall Mounting with Under-Voltage Release Attachment.

IT will open the circuit under conditions of heavy overloads without injury to contacts by excessive arcing. The "open" position is maintained by gravity.

Fuses are not satisfactory for similar service, as momentary overloads, particularly at starting, are liable to blow the fuse, thus preventing the motor from being again started until the fuse is renewed.

A fuse large enough to allow the motor to be started will not protect the motor while running.

Westinghouse Type H Oil Breakers are supplied in two, three and four poles, with current carrying capacities up to 300 amperes per pole.

Canadian Westinghouse Co., Limited, Hamilton, Ont.

TORONTO, Traders Bank Bldg. | MONTREAL, 52 Victoria Square | OTTAWA, Ahern & Soper, Ltd. | HALIFAX, Telephone Bldg. | FORT WILLIAM, Telfer Bldg.

WINNIPEG, 158 Portage Ave. E. | CALGARY, Grain Exchange Bldg. | EDMONTON, Dominion Bldg. | VANCOUVER, Bank of Ottawa Bldg.

A CORRECTION

It is being publicly stated in various newspaper reports on the situation in Ottawa in connection with the purchase of Motor Trucks for the Militia Department that—

"THERE ARE NO MOTOR TRUCKS MADE IN CANADA"

In the interests of our many customers who have bought our goods because they are "Made in Canada," and for the protection of the results of our four years' existence in Canada as makers of motor trucks, exclusively, we desire to correct the impression which the statement above referred to creates.

The facts are as follows :—

1.—Our Company is a Canadian corporation, with no connection with any motor truck company in the United States.

2.—Since 1910 we have made motor trucks in capacities of 1, 2, 3½ and 5 tons at our factory in Walkerville, Ont.

3.—At the present time we purchase Canadian-made material from some 12 to 14 other Canadian manufacturers.

4.—We import some finished material from the United States, but over 60% of the net value of our machines is purely Canadian-made.

5.—We are not "merely assemblers." We design our own product, we have our own patterns, we work out our own specifications. To use the term "merely assemblers" in connection with our factory methods creates a wrong impression in the minds of people who do not understand this business. Just as unreasonably the activities of manufacturers of watches, pianos, locomotives, street cars, guns, etc., might be depreciated by the use of the same term merely because they all buy certain material in a finished condition.

6.—The operation of our factory at full capacity, which is three motor trucks per day, results in employment to 250 to 300 Canadian workmen.

7.—From a Canadian factory we have furnished several hundred motor trucks to Canadian buyers, and we are doing business with foreign countries successfully.

This is a paid advertisement, being the easiest way to enter our protest against the statement first referred to gaining ground.

It is not published in an attempt in any way to criticize, or influence, the purchasing of American-made motor trucks by the Government.

For the sale of our product we depend entirely upon our ability to demonstrate or test our motor trucks in competition with any other make.

Dated at Walkerville, Ont., December 16th, 1914.

The Gramm Motor Truck Co. of Canada, Ltd.

"Truck Makers Exclusively"

INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XV. | TORONTO, JANUARY, 1915 | No 6.

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

SUBSCRIPTION

Two Dollars per Year **Single Copies 20 cents**

Advertising Rates made known on application

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War Contracts and Industry.

ON December 7th, the Bulletin of the Merchants' Association of New York stated that the war orders received by the United States amounted to $200,000,000. *The Monetary Times,* of Toronto, in its issue of December 4th, estimated the value of the war orders placed in Canada at $40,000,000. Let us suppose that these figures were increased by 20 per cent. on January 1st. Consequently, if these estimates are approximately correct, war orders amounting to about $300,000,000 have been placed in Canada and the United States up till the beginning of 1915.

What does this war business mean to Canada? Before attempting to answer this question we would like to state that the beneficial effect tends to be exaggerated.

In September, 1914, Mr. E. H. St. Denis, Acting Chief of the Census and Statistics Department, Ottawa, stated to INDUSTRIAL CANADA that "twenty per cent. addition to the 1910 statistics of industries would be reasonably accurate," to bring them up to date under normal business conditions.

Accordingly, the value of the goods made in Canadian factories in one year should be about $1,400,000,000. Speaking accurately, this amount would represent our annual output at full speed; or in other words, the normal capacity of all our factories. That means an output, on the average, of $116,000,000 monthly.

Therefore, the total war orders placed in Canada until January 1st, would keep our entire industrial plant busy about twelve days, and all the orders given to the United States would keep us running less than two months.

This shows how little Canadian manufacturers depend upon war orders for general prosperity.

We do not wish to belittle the contracts received. They have been most welcome to certain firms who make war material. Such orders are paid in cash and are, therefore, twice blessed. But, after all, how many manufacturers make goods which can be used in war? A considerable number, no doubt, but this number is only a small percentage of all the manufacturers in Canada. And we must not forget that a great many of our manufacturers, particularly those who had extensive export trade, have been adversely affected to a serious degree. The great fact to be borne in mind is that Canadian industry as a whole has been hit by the war and that these war orders are merely bright spots.

Unfortunately, the general public does not recognize this. There is a tendency to say: "The manufacturers are getting enormous war orders and, therefore, need no attention from us."

Canadian manufacturers require more than war contracts to keep them afloat at present. Compare the total received with $633,692,449, the value of goods imported into Canada for consumption during the year ending March 31st, 1914, or with $378,118,810, the amount paid by Canadians in the same interval for imported goods "wholly or mainly manufactured."

If we had bought at home last year we would have kept in this country a sum thirteen times greater than the value of all the war contracts given Canada up to date. Our purchases abroad for manufactured goods alone amounted to eight times the value of our war contracts.

Canadians should help the war offices to keep Canadian factories busy.

United States Paying Debts in Goods.

WHEN the war began the United States owed Britain about $300,000,000 on the international trade balance. This liability was quite separate from the $5,000,000,000 of British money invested in the United States in fixed and floating capital.

Britain sent Sir George Paish to the United States with the proposal that the $300,000,000 be paid in gold. His mission was only partly successful. The United States quickly realized that gold paid to Britain might be spent elsewhere, in Canada for example. Consequently, the United States said to Britain: "We'll pay in goods instead of gold," and Britain is taking most of her debt out in trade. There was nothing else to do, since the international facilities for collection are necessarily limited.

But the fact remains that Canadian manufacturers might have sold more war goods to Britain if Cousin Jonathan had not defined his shrewd policy, "Take it out in trade."

The Forest Fire Criminal.

A MAN was sent to jail for three months recently for leaving a fire in a forest. The sentence should have been for life.

It was probably a similar criminal whose neglected camp fire or unextinguished match lighted the conflagration which swept over Northern Ontario in 1911, destroying many lives and inestimable property.

A careless man in a woods is a much more dangerous character than the confirmed criminal whose trade is arson. The law is on the alert for the incendiary. Punishment is sudden and severe.

But the fool roams the woods alone. The forest ranger may never see him. His guilt is difficult to prove. When it is proved the penalty should be an object lesson to all potential criminals of his class.

The Lobster Fisheries.

THE toothsome lobster is not war diet. Lobster palaces are closed and lobster suppers are no more. Foods are now purchased for their filling and staying qualities rather than for their power to tickle the palates of epicures.

Since the majority of the belligerent nations are partial to lobster in times of peace, our industry has been seriously hit. Last year the countries now at war bought Canadian canned lobsters to the following amounts: United Kingdom, $1,010,367; France, $703,469; Belgium, $124,283; Germany, $182,033; and Russia, $2,160, making an aggregate of $2,022,312.

As we sold abroad last year $2,983,987 worth, it is at once apparent that our export trade in canned lobsters has almost disappeared.

Neutral purchases last year were: United States, $808,296; Denmark, $33,069; Holland, $31,713; Norway, $14,114; Sweden, $69,092. The last four countries will no doubt endeavor to do without lobsters at present and, from all accounts, there are not so many lobster eaters in the United States now as last year, when they bought from us, in addition to the canned lobsters mentioned above, $707,486 worth of fresh lobsters. Under these circumstances, it is not surprising that our lobster canners are asking the Dominion Government to suspend licenses for a year so that surplus stock may be sold.

This application is being opposed by some of the fishermen and, at first sight, sympathy goes out to them. But it must be remembered that fishermen do not confine their entire activity to catching lobsters and that they can transfer, to a considerable extent, their energy to the pursuit of the commoner and cheaper fish which will have a much more extensive sale than lobsters during the war. It is claimed on good authority that our lobster beds need a rest and that the present is an opportune time to remedy the damage done by the extensive and illegitimate capture of young lobsters. Moreover, if another season's catch is thrown on a glutted market, the returns to fishermen and canners may compare unfavorably with their cost of production.

Why not let the lobsters grow for a year?

The Maritime Forward League.

WHEN the leading men of the Maritime Provinces launched the Maritime Forward League at their conference in Amherst, they started a movement which should influence the future of Nova Scotia, New Brunswick and Prince Edward Island. There is to be no narrow enterprise limited to a particular activity, but instead an all embracing attempt to get under the three provinces and lift them a notch or two upward. This conference is one more example of Canadian co-operation. First, we saw farmers and manufacturers confer in Winnipeg, then the same manufacturers and farmers going hand in hand to Ottawa, and now all classes in the Maritime Provinces sink their differences and unite for the common good. And while the Maritime Forward League was designed to further particularly the interests of three provinces, this happy result cannot be achieved without producing a beneficial effect on other provinces and on the whole of Canada.

War is the great domestic pacifist.

Among many important resolutions, which are published elsewhere in this issue, one of the most important was "that all manufactures of the Maritime Provinces, wherever possible, shall bear in a conspicuous place this distinctive mark, 'Made-in-Canda.'"

One of the obstacles encountered by those who are willing to patronize home products is the difficulty of knowing that they are getting Canadian-made articles when they ask for them.

The Maritime Provinces have realized that the watchword of Canada for the next few years must be "Produce,"

and with this knowledge in mind they are directing their energies towards securing a simultaneous increase in the production of their farms, dairies, fisheries, mines, orchards and factories.

United States and "Made-in-Canada."

THE attitude of the United States towards our "Made-in-Canada" campaign, judging from newspaper comment, is not openly adverse. Up till the present, in fact, it has been agreeably free from bitterness.

The people of the United States understand that they can scarcely criticize us for pressing a "Made-in-Canada" propaganda at a time when they are putting into effect a "Made-in-the-United-States" policy. Probably, also, they realize the significance of the fact that we no longer have huge sums of borrowed money to squander on imported goods.

The Failure of Trade Unionism.

ONE of the strongest claims made in defence of international trade unionism was that it constituted an insurance against war.

"We will never fight our union brothers in foreign countries," was one of the commonest statements made by trade union leaders.

Yet the most startling feature of the present war was the ferocious alacrity with which German and Austrian trade unionists flew at the throats of their Russian, French, Belgian and British brothers.

As a keeper of the peace, international unionism has been a failure.

"What is the Matter with Farming?"

IN a recent editorial entitled "What is the Matter with Farming?" the *Nor'-West Farmer,* of Winnipeg, deals with a problem to which special attention has recently been directed by the joint meeting of the agricultural and manufacturing interests at Winnipeg and the Settlement Conference at Regina.

"Just so as to show our hand right at the start," says this journal, "let us begin with the general statement that for the average farmer who has attended strictly to business, who has been wise and conservative in his investment, who has had a decent working capital, and who has enjoyed reasonably good fortune, the past three or four years have been satisfactory ones.

"But still, even though some of the best of our farmers are prospering, there are others—whole communities of them, in fact—who, to use a metaphor, are 'sweating blood'—not all of their own fault, either—and while the commission idea is simmering, a few facts that are worthy of serious thought may be put down for consideration."

The situation is then analyzed under seven heads:

First, it is claimed that farmers in Western Canada have too heavy overhead expenditure in proportion to the working force of the farm, the acreage under cultivation and the yields obtained. To carry this overhead they are in constant need of fresh capital, which is now most difficult to obtain. No solution is offered for this difficulty.

Second, many farmers are settled upon land unsuitable for cultivation through mistakes of colonization policies which did not distinguish between good and bad soil. *The Nor'-West Farmer* suggests that the Government cease opening homesteads in such districts, that the present settlers be assisted to substitute grazing for farming and that exhaustive soil reports of all prospective farming localities be prepared in order to make the best use of the land.

Third, the high rate of interest on loans hampers enterprise. On this point, the editorial says:

"Two objects should be sought—first, to secure long term loans at a low rate of interest; second, to keep the solvency of all borrowers under the scheme up to a high standard by imposing a strict limit on the amount of money to be lent under any such scheme. Big borrowers are bad creditors, and high rates of interest thrive on bad or risky credits. In this connection, good creditors are at present suffering with bad ones. The generally overdrawn condition of our finances makes its levy by too high a rate of interest against all borrowers, good and bad alike."

Fourth, the transportation rates are said to be too high and it is suggested that they be lowered by forcing the railways to pay dividends on a physical valuation basis.

Fifth, comes the tariff comment, as follows:

"We need the minimum amount of protection commensurate with reasonable encouragement to Canadian manufacture. There is a happy medium between the entire sacrifice of our markets to all foreign nations, on the one hand, and high protection on the other. On all such goods as farm machinery, fuels, lumber, cement, clothing and other essentials we must work for a downward revision as opportunity affords."

Sixth, a strong plea is made for better farming:

"What is wanted in many districts are a few leaders—farmers who, by better crop rotations, use of manure on the land, deeper cultivation and employment of more carefully bred types of crops, will really show where individual farming effort may be improved."

Seventh—this is an interesting paragraph, styled "Sentimental readjustment," running thus:

"The microbe of unrest has got into far too many families. There are many farmers who are to-day rearing their children in an atmosphere of discontent that is almost certain to drive them off the farm into conditions of service elsewhere not one whit better than they could evolve at home, and with less certainty of independence before them in the distant future. Farming was not meant to be a sinecure; neither was carpentering, nor bootmaking, nor school teaching, nor merchandizing, nor most other occupations we can think of. And there is nothing to be gained by the workers in any one of these industries giving themselves over to wanton disquietude or encouraging

the idea that theirs is 'the last job on earth.' There is more and better opportunity on the farm to-day than ever before; and this is the doctrine that, in the main, our fathers of agriculture should promulgate."

An editorial such as the above, appearing in a journal of the standing of the *Nor'-West Farmer,* shows a most commendable desire to treat the problem fairly. There is a gratifying absence of the "blue ruin" attitude, for it is pointed out that, while there are certain things which need remedies, the general situation is sound. Also, the farmers are told frankly by their own journal to study and introduce better methods and to chase away the "get rich quick without work" germs and the will o' the wisp, discontent.

With the general definition of Protection we agree, but we would like to venture the opinion that the tariff on the articles named is "the minimum amount" necessary to keep the industries involved afloat in these perilous times. Also, on the question of freight rates, while the manufacturers are vitally interested as well as the farmers, both classes must realize that service is an important consideration as well as cost. Therefore, we can only agree to a readjustment, which will leave the quality of the service unimpaired.

The Nor'-West Farmer strikes the right note. It looks at other cases besides its own, and shows that it believes in co-operation rather than in unyielding aggression, as a means to advance the interests of those for whom it speaks.

The Policy of Suicide.

A TORONTO agent for an Ontario factory visited the INDUSTRIAL CANADA office recently with a grievance. "A Chicago manufacturer," he said, "is now in Toronto on his annual Canadian visit and is boasting that he has secured large orders. This Chicago man competes with our factory. My orders in Toronto during December were about one-fifth of those I received last December. One reason for this falling off is that the Toronto manufacturers who are preaching the Made-in-Canada principle are giving orders to our Chicago competitor."

This is the policy of suicide. Sooner or later, the manufacturer who saves money now by buying outside of Canada will reap the results of the bad example he has set. Toronto manufacturers are not the only ones who are pursuing this short-sighted policy. All over Canada it has been followed and is still followed. It leads to ruin.

There are now, as there have been, many manufacturers who practise as well as preach "Made-in-Canada." Since the beginning of the war restrictive orders have been issued to purchasing departments of our factories asking them to confine their buying to Canada. But there are still exceptions, and the exceptions are noticed. The imminent danger is that the public will generalize from these exceptions and say: "The manufacturers ask us to buy in Canada while they buy outside of Canada when they can save a few dollars. We'll do the same."

Consequently, the "Made-in-Canada" campaign will have its influence lessened and a great opportunity will be lost.

The present war gives Canadian manufacturers the chance to entrench themselves permanently in the estimation of Canadian consumers, and setting a good example is the most effective method of accomplishing this result.

Loss from the War.

THE recuperative power of nations prostrated by war is one of the marvellous lessons of history. All the countries engaged in the present conflict have passed through scores of wars and are still great. When the inevitable conclusion is reached the world will go on living much as it lived before. There will be depressions, readjustments, alterations in maps, but no vital changes affecting the foundations of society.

The material loss caused by this war is being greatly exaggerated. Most of the fighting is in the open and the earth's crust will suffer no permanent injury through furrows made by spades or shells. Fortifications have been destroyed, but they are obsolete and will not be rebuilt. Military and naval equipment has disappeared, but will it be replaced? Buildings, furnishing and clothing have been destroyed, but their replacement will require wood, stone, steel, iron, cloth, labor and other things of which there is abundance in the world waiting to be used.

But what about money to buy material and pay labor? The amount of gold in the world will not be decreased by this war; instead, it will probably be increased by the production of such gold mines as continue in operation. The only conceivable loss of gold will be that buried by those who are killed. The world's stock may change hands but it will not diminish. It has merely fled temporarily into bank vaults and into secret hiding places and will emerge when peace is restored. Credit, which has practically disappeared, will return with the gold on which it is based, and we venture the propheey that a good proportion of the world's supply of gold will be in British hands after the war.

Where then is the loss?

In two things, principally: labor and crops. The time of the men drawn for fighting from productive labor is gone forever. Although men and their skill can be replaced by other men and other skill in time, the energy expended in fighting, and, later, in replacing the killed and disabled, is a loss. The crops which are destroyed and the crops which were prevented from being planted are also a loss, because the food supply of the world, being scarcely greater than the world's consumption, and perishable, must be kept fairly constant and cannot wait for replenishment. Unfortunately, owing to the number of combatants and the extent and fertility of the areas devastated, the loss from these two causes in this war will be enormous.

The first cause will affect Canada, but not the second. The sinister proverb, "the loser pays," will not apply to us.

On the contrary, as we have food to sell, we shall benefit. There is an undue amount of pessimism prevalent regarding our material prospects after the war. While we shall have to face the transition period of waiting until gold reappears and credit is restored, the fact remains that we have the raw materials which will be needed for reconstruction.

When our crops refuse to grow, when our mines fail, when our forests disappear, when our waters yield no fish, and when our manufacturers are unable to multiply values, then Canadians should despair, and not before.

Labor Demands in Ontario.

A DEPUTATION of labor men recently waited upon the new Ontario Cabinet asking that every child upon leaving school be required to secure a certificate of age from the teacher, which will be presented to prospective employers: that the employment of white women by Chinamen be prohibited; that all shops and factories be required to provide lunch rooms and wash rooms; that where moulders are employed inspectors should be chosen from the moulders' union; and that the unearned increment of land be taxed.

We agree with the first two requests. Manufacturers do not want to employ children under legal age, but it is apparent that they find it difficult, since appearances are deceitful, to investigate the age of all those who apply for work. The presentation of a teacher's certificate would be a convenient method of solving the difficulty. As for employment of white women by Chinese, the practice is utterly indefensible.

Lunch and wash rooms involve the old question of how far paternalism towards factory employees should be carried. Nearly all the new factories in Canada now provide all necessary conveniences for their employees, partly for humane reasons, and partly because such action tends to keep employees in a fit condition to do their work. While we agree in part with the request of the labor men, we suggest that the present is not a proper time to confer any sweeping statutory powers on inspectors which would enable them to order manufacturers to instal expensive improvements.

With the fourth request we disagree. Manufacturers should not be limited to selecting inspectors from any union, but should be allowed the liberty of choosing a man for any position on his qualifications to fill it.

The last request falls in with our policy of taxing land and lightening the burden on improvements, but we fear that there will be no increment on land in Canada for some time.

The Winter's Waste.

"ON farms where there is practically no work to do during the winter months there is a large waste of valuable time," says the *Grain Growers' Guide.* "In these days of keen competition in every line of business the best results are secured by an arrangement of the farm business which provides labor on the farm during every month of the year. The profits on grain farming alone in ordinary years will not compensate for the loss during the winter months. This is one of the problems to be solved in placing farming upon a profitable basis."

The *Guide* states a truth very clearly. It also suggests a question: Why don't the farmers find profitable employment in the winter? There are various answers, but two which will most readily occur are that many farmers do not want to work in winter, and also that many farmers find it difficult to find profitable employment.

In Ontario, Quebec, Nova Scotia and New Brunswick farmers used to work in the woods, cutting timber to sell or for building purposes on their own farms. Now most of the farms have enough buildings, and, also, many new structures are built with brick, stone and concrete. The land is practically all cleared, and on the farms there is little timber for sale. Consequently, the lumber industry affords little employment in the settled districts, and the disappearance of maple has reduced another winter occupation, the manufacture of maple sugar and syrup.

Stock raising, which should give opportunities for almost continuous employment has been affected by the prosperity of the older provinces. Most of the farms are clear of mortgages and their owners feel that they can enjoy leisure in winter, free from the varied demands of animals.

In the prairie provinces, few farms are equipped with sufficient buildings and fodder to keep much stock, and winters are passed in enforced idleness. Consequently, of late, Canada, an agricultural country, has been importing agricultural products.

The solution of the problem seems to rest chiefly in stock raising, and the high prices now prevailing should hasten its practical application.

AS USUAL, SAY PAPER MEN.

Officials of Canada's leading pulp and paper mills inform *The Monetary Times* that with satisfactory demand and prices prevailing, they are working at full capacity and selling the output as manufactured. Future export conditions are not easily gauged owing to the difficulties arising from the European war. The various companies have replied to the inquiry as follows:—

Laurentide Company.—The mills are working at full capacity; but there seems to be considerable uncertainty in the market due to unforeseeable conditions in the export market.

Spanish River Pulp and Paper Mills.—All the mills are working at full capacity and the demand is keen at the present time.

Riordan Pulp and Paper Company, Limited.—The mills are working as usual at full capacity. The demand is normal and prices a little better.

Wayagamack Pulp and Paper Company.—Ever since the mill commenced working the company has been operating at full capacity, which is about 50 tons paper and 50 tons pulp per day.

PROTECTION! NATION! AND EMPIRE!

By BRITTON COOKE

I.

THERE is an aspect of the question of Protection which in this country has been neglected. It is not new, but it is important. It is a view of the question which, one might reasonably hope, may ultimately influence the Canadian people as a whole to adopt a different attitude toward Tariff matters and to support the Protectionist ideal, not grudgingly but cheerfully, considering it not merely from the respective viewpoints of manufacturer and farmer, radical and reactionary, but as men and women with only one interest at heart—Canada. The difference between Free Trade and Protection would then be, as applied to Canada, the difference between those who believe in the Dominion as a sort of open commons, or general exploiting ground for the adventurous sons of the rest of the world, and those who believe in Canada as a rounded-out nation within the group of nations which is called the British Empire. It would be the difference between those who believe in doctrinaire propaganda and those who recognize Patriotism as one of the great factors in the making of true men, and National spirit as the essential of a great and good state. It is difficult to see, if a man believe in these latter things, how he can fail to believe also in Protection as the indispensable factor in fostering these qualities in the individual and in the whole community. For Protection, wisely administered, is the only influence, short of a war carried into the midst of our own country, which can be relied upon to anneal into a homogeneous and resilient fabric, the scattered interests and divergent objectives of Canada.

Of a proposed change in the Tariff men too often ask, "How will it affect the prosperity of this class in the community? Or of that one?" "Shall I receive more for my goods or less?" "Shall I have to pay more for my food or less?" Our political leaders have too often been guilty of misleading their constituents by displaying Free Trade or Protectionist arguments as bribes, or as a means of incensing one section against another, to the advantage of the politician. Even sincere men tell us that Free Trade is the great ideal—why? Because they are English Free Traders, born of Free Trade families in England, and because their minds have not been sufficiently flexible to see the differences in application. He shouts: "Cheaper living!" And the Protectionist, who is probably a Protectionist by accident of birth or interest, replies: "Better wages!" But greater objectives than cheaper living and better wages seem to have been lost sight of, and it often seems almost necessary to remind men that Free Traders and Protectionists alike must take a higher point of view—must see that this dumb expanse of land which we call Canada and which permits a paltry eight million men to call her "theirs," is pregnant with a giant race, and those who husband her to-day must make the way easier, not harder, for that culmination. For there must grow up in Canada that same love of the very soil that inspired the Belgians to die cheerfully for what, compared with Canada, was a mere handful of aged fields. Men soul another. The facts are otherwise. Economics and the ism a matter of the spirit—that trade is one thing and the soul another. The facts are otherwise. Economisc and the spirit are close related. History records a mundane foundation for the noblest works of man.

II.

Curious questions underlie any question of this sort. Is there, to be candid, a Canadian National spirit? Is there a vigorous inter-Canadian loyalty? Is there a Canadian centre of thought, a national heart from which national ideas and feelings may be readily and equally diffused to all parts of the organism? Is there Canadian Literature? Canadian Drama? Is there even a substantial prospect that we may achieve either? If one answered "No," could you successfully and sincerely answer "Yes"? If one answered "Yes" could you conscientiously agree with it? Could you even excuse all these lacks—supposing first you had admitted them—on the grounds of youth?

Canada has been noted, ere now, as an artificially designed political unit whose political boundaries are not her physical boundaries, whose social boundary does not exist, and whose economic boundary is an imaginary line slightly reinforced by a schedule of customs percentages. Here is area enough for nine Empires, variety enough for the ficklest nature, wealth enough to make every child a potential Crœsus, leaving better than a bank account to his own children after him. We have already races enough and tongues enough to stage the confusion of Babel; religions enough to crowd our cities with churches. The greatest nation in the world came out of an area incomparably small. The drama of Israel might have been staged in a fraction of the West. Yet our theatres are fed from New York, Chicago and San Francisco. Our jokes come from Broadway. Our light reading is made in Philadelphia, and the heavier material in the British Isles. Our summer sport is under the tutelage of an American trust. Our labor unions are centred in the United States. Englishmen dominate our railway boards, and Americans manage the machinery. The highest rewards in trades, professions or arts, or even in the social world, lie outside of Canada. Americans dominate our fishing interests. Though it is theoretically possible for Canada to stop Germany's nickel supply, she must first consult the American trust which controls most of the Canadian mines, and the Washington that stands behind that trust. There is no exclusively Canadian race, religion, language, set of traditions or set of trading interests. There is no truly Canadian tradition threading coast to coast with patriotic thrill, except the dry glory of the B. N. A. Act and the only half-understood courage of the men of Confederation. We have not even a common hatred—a Heaven-given enemy whose covetous eyes would make us conscious of the value of our heritage. Each chief group of communities in the loose-strung necklace which we call Canada has closer trade affinity to the south than to east or west. In short, a score of subtle influences tend to draw gently apart the sections of the so-called whole, and only three bind them together again.

The three are great: Imperial sentiment—which is often mistaken for Canadian sentiment, and is curiously compounded with provincial sentiment; the trans-continental railways; and the Tariff. The first, now burning strongly in the breasts of our forty-six per cent. British-born, cannot honestly be guaranteed in perpetuity against the unborn generations of foreigners and Franco-Canadians; only by focussing the interests of British-born and foreign-born alike

in a united Canada, can the loyalty of that Canada be transferred to the Empire as a whole.

The Second of the three factors, the railway, is artery, vein and capillary, carrying life to every part, renewing tissue, co-operating with the ganglia of telegraph, telephone and post. Without that Second the First would slowly lose its power to hold the parts together—and without the Third both would fail! Interests, communications, affections, and intra-national relationships are based upon traffic! And that traffic has been and must for many years continue to be held within the artificial boundaries of an artificially-designed nation—by artificial means! Only a few strands of telegraph wire and a double pair of ninety-pound rails link West with East across the north-Superior wilderness. Cut down the tariff and behold them rusting! Observe traffic running in the easiest channels, new routes, new interests, new communications, new affections and new relationships grown up!

III.

An axiom underlies this matter.

In an ideal state—and there is no reason why Canadians should ignore ideals, however vast—there must be a certain ratio maintained between the two great departments of human occupation: industrial and agricultural; between manufacture and the exploitation of the raw materials which the country affords. The means of attaining this balance in Canada rest in the Tariff. The conditions of outside markets may serve from time to time to stimulate one or the other of these departments. Such stimulants are irregular, accidental, and beyond control. The Tariff is as sure as the brake on wheel, as the governor on an engine. It is, to change the figure, an instrument of precision, needing only to be wisely adjusted.

The importance of this ratio between the departments of production cannot be over-estimated. First, from the standpoint of the individual, such an equilibrium preserves to him, or creates for him, a complete range of possible occupations from which he may choose and for lack of which many a Canadian to-day is forced to live abroad. It reduces the "export" of money to a minimum. It ensures the proper "digestion" of the products of the country and raises the net-value of its exports to the highest point by guaranteeing a proper admixture of labor with raw material. It guarantees a maximum of inter-Canadian traffic, a maximum number of transactions between one department of production and the other, a maximum of inter-Canadian interest, inter-Canadian communication, inter-Canadian dependence, inter-Canadian thought, inter-Canadian affection—Canadian spirit! The Tariff gives the people, through their government, a measure of control over the price-making factors of supply and demand. It places it within the power of governments to regulate wages—a thing they cannot do when unscrupulous manufacturers are able to plead foreign competition. It tends to preserve the steadiness of prices since it creates a home-market for manufacturer and farmer alike, a market, unlike the erstwhile attractive foreign field, subject always to national control. The same conditions which affect consumer also affect the producer. And, when the nation has grown robust through the strength of its own internal economic fabric, it can then attempt the export trade with certainty of success. Strictly speaking, exports of wheat are no great gain to the nation. Exports of any raw material are in fact a sort of loss which is only to be borne while the young community struggles toward a position where it need not spend its capital. Wise farmers "feed" their crops: wise nations "digest" their raw materials. A strong, evenly-developed nation, in which the departments of industry and agriculture are reasonably balanced, can feed its raw materials to its workmen and ensure in the exported product a maximum percentage of labor value. Labor is the thing to sell! Let the proportion of raw material be ever less, not more. Material is the thing we must keep for the employment of our own. The Tariff, in short, is the means of controlling economic conditions in so far as they are affected from within the nation; social conditions, so far as they arise out of economic conditions; and the fostering of inter-Canadian interest, ambition, affection and spirit!

IV.

What, finally, is this thing called National Spirit? What are its symptoms and what its uses?

In the midst of necessary material problems men have come too often to believe that national anthems represent national feeling, and that the boast of wheat, timber and mines is a publication of nation feeling These are errors. It is only when the Canadian sees a France, or a Belgium, or an England respond with a bound to the first hint of offence from outside, when he reads of Rome, or when, walking in the streets of London, he feels a real capital, a real heart beating round his ears, that he knows the meaning of vigorous national spirit. Ships, buildings and bridges consist of innumerable parts bound together by innumerable rivets. The sudden wave against the ship's side, the sudden rush of wind against the side of the sky-scraper, the quick rush of a loaded freight train over the straddling trestle-work—these are to their respective structures what a sudden national strain is to a political fabric. The rivets of the ship, of the building, of the bridge, communicate the strain to the foundations; relieve the local pressure, make it general, distributing the stresses to a wide base. So with national spirit.

Objections to this argument may be raised. It may be said—and may be admitted—that in the recent Imperial crisis Canada made a quick and brave response. But that was an Imperial reaction, something which men may be certain of to-day, but not so sure to see five generations hence. It may be said that there is great patriotism in Ontario, or Alberta, or the Yukon. But it is usually a local patriotism, seldom extending outside the boundaries of the province in which it flourishes. It may by others be said that the policy of Protection has resulted in other countries in the corruption of legislators, the up-building of predatory corporations and the raising of the high cost of living. These things might even be admitted. But they are admissable only as weaknesses of a young democracy, the weaknesses of electors and their legislators, executives and judiciary. They are no more essential to Protection than death is certain to follow the use of strychnine. Protection is a powerful medicine to be applied with skill. It is a delicate instrument with which much harm can be done, and—if misused, or if regarded from the purely selfish standpoint which so often marks tariff discussions—may give greedy men the opportunity they seek, to enrich themselves at the expense of the community at large. But it is no less invaluable. It may be said that Britain has Free Trade. True, but Free Trade "protected" by Britain's mastery of shipping and control of capital, protected by the fact that she was first to start in the race of industrial development following the invention of power-machinery. She is "protected" by the control she is able to exercise over foreign competitors through various means, and by the control of sources of raw material through her shipping and colonies. Her "Free Trade" was made necessary by the over-development of her industrial side. To feed the industrial population she had trained and the mills she had erected, she could no longer rely upon her own resources,

but must draw from abroad. The ships which carried out her manufactures could bring back just one cargo—raw materials ! And to tax that cargo was to tax the means of life and labor for her people.

It was the Protective Tariff, devised by Alexander Hamilton, that bandaged the parts of the United States until they grew together. It was by a Protective Tariff that Bismarck forced the divergent interests of the German states into one great mould and laid an economic foundation for the nation whose methods and ambitions we abhor, but whose singleness of mind and purpose we must admire. Canada, lacking the terrible tradition out of which the United States sprang, without the oppression of enemies such as lay close to the European states, without any of the compressing or contracting influences that have beaten and squeezed other nations into being, needs her Protection even more than they. She requires, not a Tariff designed to quiet this faction and that, and content this interest and that. Not a shilly-shallying, give-and-take Tariff, based on endless compromises with endless demands of selfish classes. But a Tariff taken in hand by skilled men, men of great patriotic feeling and a capacity for patient research, who will wield the Tariff as a surgeon wields knife or a physician a subtile drug; raising it here and lowering it there, adjusting and fitting it, skilfully and wisely, decade by decade, until a reasonable equilibrium shall have been attained, wealth conserved, "digested" and increased, interests and affections welded, and the nation made a whole.

"MADE-IN-CANADA" NEWS—ECHOES OF THE NATIONAL CAMPAIGN

Where Do You Buy Paper ?

EVERY Canadian manufacturer buys some paper. Where? This is the point raised in the following letter written to INDUSTRIAL CANADA by the Howard Smith Paper Mills, Limited, Montreal. Other Canadian paper making and printing establishments are asking the same question :

"At the present time there is something over eight million dollars worth of paper imported into Canada, of which five millions come from the States.

"A great part of this paper is ultimately used by Canadian manufacturers, and if the Canadian manufacturers would specify Canadian made paper it would certainly help the trade to a very marked extent.

"We would also state that while all manufacturers and business people use day books, journals, ledgers, either on the loose leaf system or in the old fashioned bound book, that paper which goes into most of these books is imported. This is a very important part of the trade. There is no reason why Canadian papers should not be used in these books. Certain loose leaf manufacturers refuse absolutely to even try Canadian paper. If we would get the users of these books to specify Canadian made paper it would help a whole lot. Of course the trouble would be, as stated above, certain manufacturers prefer to use imported paper so that they can claim it is a little different from the other people, but there are bookbinders and loose leaf manufacturers who do use Canadian paper, and in any case where a consumer found it difficult to get Canadian made paper in his books we would be pleased to give him the name of those manufacturers who are using Canadian stock, and to guarantee the work they do is satisfactory and the price no higher, if not less, than on imported stock."

"Made in U. S. A."

The Imperial Varnish and Color Company, Toronto, directed our attention to the following request issued by the National Varnish Manufacturers' Association of the United States to its members:

"It is recommended by the Educational Bureau that all members of the Association hereafter either print on their labels, or attach in some conspicuous form to their cans, the words 'Made in the U. S. A.'"

Why not put "Made-in-Canada" on our varnish labels and cans ?

Made Everywhere but Canada.

(Editorial from Graphica.)

When we got up the other morning and started to button our suspenders, we determined before we had finished fixing our pants for the day that this number of Graphica should be a gloom-chaser.

It was really a dainty pair—pale blue, we don't mind admitting. Indeed, it was the pale blue that first caught our eye. "We will have that pair," we said to the storekeeper, and for the life of us we couldn't tell why, except that it was pale blue, and really was a dinky pair.

But on the morning to which we refer we were in no mood to be pleasurably affected by the pale blue of any pair of suspenders. We had been reading the night before of the atrocities of the Germans in Belgium.

We were thinking of these things, we say, when our eye caught some little letters printed in gilt on our suspenders—letters which, on closer inspection, proved to be the almost undecipherable inscription, "Made in Germany."

Made in Germany! The inscription was like a red rag to a bull. Could we, British to the backbone and Canadian to the finger tips, could we stand that ? We could not. We rended those suspenders limb from limb, determined that here was one Briton, at least, who would not have his pants held up in a British Dominion by a pair of German suspenders.

And then we went to shave. "Germany" we discovered engraved on our shaving brush. "Ground in Hamburg" we found etched upon our razor. "Austrian manufacture" we noticed with a sigh on our razor strap.

"Ha! ha !" we laughed—one of those hard laughs, you know, without any mirth in it—"we will now wash ourselves with German soap, sprinkle German hair restorer on our thinning locks, run a German brush over our scalp, put on our German shirt, button up our German collar, tie our German cravat, go down to breakfast on frankfurters and start off to do our day of British work with German appliances." And that, more or less, is what we did.

"But," quoth the Britisher and us, "Nevermore."

That word "Nevermore" represents the first of many big gains that are coming to Canada as a result of this "Made in Germany" war. For what we said is what hundreds of thousands of Canadians have said—nay, it is what seven and a half millions of Canadians have said. They have said, "Nevermore shall we buy German goods!"

Surely this resolve will endure as long as German despotism reigns.

That is a great gain for Canada—a negative gain, but still a gain. The duty that lies before us now is to translate a negative gain into a positive one; to see to it that not only do we refuse to buy goods "Made in Germany," but that the goods we buy bear the label "Made in Canada."

Want to Buy in Canada.

The Western Steel and Iron Company, Winnipeg, state that they are in the market to purchase 528 pieces of drawn brass tube, 7 feet 3¼ inches long, 1.062 inches inside diameter and 1.315 outside diameter. The Company say: "If it is possible to obtain this material at a reasonable price in Canada we should much prefer doing so."

Professor Shortt's Diagnosis.

While Professor Adam Shortt did not deal directly with the "Made-in-Canada" campaign at a recent meeting of the Montreal Branch of the Canadian Manufacturers Association, he showed how much such a policy is needed. His thesis was that Canada as a nation had for many years past borrowed too much, lived too extravagantly, spent too lavishly, and generally rioted in high living on speculative prosperity. Now, it was for the Canadian people to readjust their methods of living to new conditions on a lower level, with a smaller rate of earning, a lower ratio of spending, and probably a higher return for the money earned and spent, so that the country could hold its own with others in the world's markets.

To this end Prof. Shortt advocated a closer co-operation between the manufacturers and the farmers, with an increased agricultural production and a reduced urban population. If this were done he was hopeful that, with the stagnation in Europe which would come after the war, Canada, with its great wealth in natural resources, must have a future full of hope for even immediate prosperity.

Dr. Shortt said that the present crisis was not a matter of Free Trade or Protection, since Canada produced practically all its necessaries of life. In fact, the increase in prices during the past thirteen years had been greatest with articles that were produced in Canada, while the increased cost of articles produced abroad and subject to a restrictive tariff had been comparatively small, so that obviously the tariff had little to do with the increased cost of living.

The speaker argued that the present conditions were not due to the war, but had come before it, and were merely accentuated by the outbreak. Speculation and over-valuation of land instead of its cultivation, had led to a highly artificial prosperity; people living on inflated values, and forgetting that they could not permanently live upon each other or on borrowed money. Now the reaction had come and it was impossible to start manufactures in the West, because the inflated ideas of the value of work made wages prohibitive.

The speaker declared that the hope of relieving the strain by forcing a reduction of freight rates was absurd. Canada had too many railways and the cost of supporting large stretches of roads which had no local traffic was very great.

Canadian Manufacturers Got There First.

(From the Toronto World.)

For patronizing paternalism that beats anything in Germany, commend us to the circular recently sent out by The Chicago Herald, entitled, "How to Get the Trade of Our Next Door Neighbor."

The neighbor in the case happens to be Canada. The people who are to get it are of course the manufacturers of the United States. All the reasons why and the methods how to get this trade are set forth with characteristic cocksurety. We are supposed to be cut clean off from the $150,000,000 worth of goods imported from England, which is no more true than to say that the British navy does not control the sea. The Americans will benevolently supply us with these goods. Thanks awfully! As to the $26,000,000 imported from countries other than England and the United States—why of course grab that also. Nothing easier. They say we have nine million people—approximately correct; that we speak a common language—touching affinity; that we deal in dollars and cents—which of course we learned from the United States. Our crops this year, while not so big as other years, are more valuable; therefore grab the farmer's money and send it across the line.

Our credit is said to be good; thanks again, but we are the people who made it so.

These American journalists are the people who ever since the war began have been building cloud castles of the trade they intended to grab from all the belligerent countries in all parts of the world. For three months they have been counting up by the billions a year what this war will mean to the great neutral nation—the United States.

But the one thing which they seem to have overlooked is that it was possible for Canadian manufacturers to be alive to the situation also, and while they have been planning excursions of American manufacturers into the Canadian field, the Canadian manufacturers and those American manufacturers who have become Canadian by establishing branches in this country have risen to the opportunity, and with the aid of the press have created a loyal national sentiment throughout the Dominion which will make it exceedingly difficult for these Americans to seize any portion of Canadian trade to which they are not fairly entitled.

Practical Patriotism.

The Department of Trade and Commerce appeals strongly to Canadian consumers to buy Canadian goods. In a bulletin just published under the Minister's authority it is pointed out that home patronage means home employment:

"Who is there in Canada, remembering Belgium, will buy 'Made in Germany,' and who in Canada will fail to buy 'Made in Canada' to the last ounce of possible production in the country, if thereby the people can take their stand behind fathers, sons and brothers, in the fight for freedom, by a course which will assist the prosperity and therefore the power of Canada in this evil day?"

ADAPTING A PLANT TO WAR SITUATION.

When the war began, the Burlington Steel Company, of Hamilton, found that trade was cut off in a great many standard lines for which they were specially equipped. They at once investigated whether some of the steel bar sections, which had been formerly made in Germany, England and the United States, could be manufactured in their plant. The Company formerly had found difficulty in getting the Canadian user to consolidate all his orders so that it would be worth while to handle these sections, which are very difficult bars to roll.

The Company have already secured orders from several Canadian manufacturers for a number of these special sections and are rolling the material in their new modern high-speed mill, which was erected specially last summer for this class of work.

CATALOGUES AND BULLETINS RECEIVED.

Herbert Morris Crane and Hoist Co.—Morris Worm-Gear Chain-Blocks.

CANADIAN RURAL ADVANCEMENT LEAGUE

By E. CORA HIND

Commercial Editor "Manitoba Free Press"

THE conference called in the City of Regina for the 23rd, 24th and 25th of November to discuss the question of closer community settlement was a notable gathering in many ways. It was attended by about 250 delegates. These represented governments, banks, boards of trade, manufactures, farming, and included a number of representatives of the various foreign settlements in the prairie provinces.

Regina Board of Trade's Scheme.

The scheme proposed by the Regina Board of Trade was to bring a large proportion of the vacant land under cultivation by establishing community settlements by means of an organization into which the management of the land should be given; that groups of families should be organized, each family receiving an allotment of 160 acres, and not more than sixteen families should be grouped in one settlement. They would be settled in small villages located in such a way that while living closely together they would be near their farms. That the groups should be organized for the purposes of buying and selling, and that one of their number should be selected by them for the purpose of doing such business as would enable the group to carry on business with the greatest efficiency and economy. That the land would have to be bought on long terms of payment, carrying a very moderate rate of interest and on the amortization plan. The credit of the whole group would be back of each individual contract. When the necessary land was in the hands of the committee, a bond would be given to the owner for the value of the land, as agreed upon between the trustees and the owner. These bonds would have a permanent market value and would be looked upon much the same as an investment, as the bonds of a municipality or a province. In view of the present financial conditions, it was thought that government endorsement would be necessary to give them an immediate value. It would be necessary for some amount of credit to be extended to the group to enable them to procure the necessary equipment to carry on their operations, and the Regina Board of Trade had made an estimate of what would be required. They believed that a community of farmers with their families, started under such auspices, would have a good chance to succeed, and that the credit could be financed by an arrangement between the Dominion Government and the banks.

It is estimated that there are 50,000 heads of families who are more or less trained farmers available in Canada at the present time for settlement on land, and 160 acres to each of these would be 8,000,000 acres immediately occupied.

What Families Need.

The Regina Board of Trade had gone into the matter very thoroughly and had even furnished, in detail, lists of the necessary articles. These amounted, per family, to $1,477.50, it being the idea that a number of the implements could be used in common, and this amount would also supply the keep of the family for the first eighteen months. It was designed for a family of four. This overhead expense was to be paid off in instalments, but no payment was to be attempted in the first two years.

The conference sat for three days, and, as a Hansard reporter was employed to take the proceedings, it is to be hoped that some time the full text of the addresses and discussions will be available.

There were some very noteworthy addresses made, perhaps the most outstanding being that of His Honor Lieut.-Governor Brown, of Saskatchewan, who, though a lawyer by profession, has been actively engaged in farming in the Province of Saskatchewan for the past thirty-five years. There are not many people in Canada who will realize that there was any land under cultivation in that province thirty-five years ago. The Conference was addressed also by the Honorable Arthur Meighen, of the Dominion Cabinet, Premier Walter Scott, of Saskatchewan, T. C. Norris, M.P.P., Leader of the Opposition in the Manitoba Legislature, who has been engaged in farming in Manitoba for over thirty years, Sir James Aikens, Verec Brown, of the Canadian Bank of Commerce, C. A. Dunning, Manager of the Saskatchewan Co-operative Elevator Company, J. H. Haslam, of Regina, who was really the father of the scheme, Dr. J. G. Rutherford, head of the Agricultural section of the Natural Resources branch of the C. P. R., and by a number of special delegates from boards of trade and from foreign community settlements. It was worthy of note that not one of the speakers, with the exception of Mr. Haslam and his fellow colleagues in the Regina Board of Trade, fully endorsed the scheme, while the majority of the speakers were opposed, and some of them very strenuously opposed to it, either in whole or in part. Every speaker, however, was fully persuaded of the need of closer settlement of the vacant lands in the west and that farm life must be made more attractive.

Criticism of Plan.

One of the great objections to the scheme was that as the proposed settlers would have no stake of their own in the property they would have nothing to lose. C. A. Dunning put it very succinctly when he said, "Take any multiplication of nothing and you cannot make anything else but nothing," or, as the scheme implied, take any number of men who had nothing to start with and put them on the land and they would not succeed. He admitted the personal element and ability to succeed, but doubted any bank or financial institution extending credit to men who had no personal stake in the land themselves. "Men who have nothing to lose," said Mr. Dunning, "are not good security, and I don't think that the Government, or any other body, would recognize them as such." This view was very fully endorsed by the representatives of the foreign communities. They were Russian-Germans and Austro-Germans principally. None of them spoke English very fluently, but they manifestly knew what they were talking about and were exceedingly patient and courteous in answering questions. Some of the points elicited by questions were that they emphatically disapproved of placing settlers on the land unless they had some stake of their own, however small, to put into it. They were keen on the idea of closer settlement, but evidently doubted the community idea working well in Canada. They emphasized the fact that communities, in order to be successful, must each have some one man at the head of each, who would have a great deal of power, and they seemed to think that, while their fellow countrymen had submitted to this in the old land, they would not be likely to do it in the west. Several of them

also spoke strongly against the idea of community credit and responsibility. They seemed to fear that the industrious members would have to carry the drones. They were particularly strong on the need of cheaper money for agricultural purposes.

Resolutions Adopted.

On the evening of the third day of the conference, a Resolutions Committee was appointed and asked to bring in what they considered the findings of the conference. The writer had the privilege of sitting with this committee and taking part in the deliberations. The committee felt that it was useless to bring in any resolution endorsing the scheme of settlement proposed by the Regina Board of Trade, even in a very modified form, and it was therefore dropped. The committee drafted a series of resolutions which were afterwards unanimously adopted by the conference. The first resolution was a strong endorsation of the request of the grain growers and manufacturers asking for the appointment of a committee or board by the Dominion Government to deal with the farm problem, and the secretary was entrusted to submit the resolution by wire to Sir Robt. Borden. The second resolution asked that the Dominion Government be urged to make a complete agricultural survey of the three prairie provinces with maps showing the characteristics of the various localities. The third resolution asked that the Dominion Government cause a branch of the Geological Survey Department to be established to carry out an investigation in districts where it had been found impossible to secure an adequate supply of well water.

The fourth resolution asked for the assistance of the Dominion Government in the matter of credits for the various live stock associations which have been formed in a number of western centres. whereby the business men are attempting to secure, on long terms of credit, for farmers financially incapable of doing so, live stock required to enable them to adopt mixed farming methods, and asking that a capable and trustworthy officer, or officers, be appointed to take up with the local associations and similar organizations which may be formed in other centres the whole question of arranging methods whereby the credit of the Government may be made available in the distribution of live stock and in other ways beneficial to agriculture.

The last resolution and the most important one was to form a perpetual board to be known as the "Canadian Rural Advancement League," to represent all organized activities of the three prairie provinces, this board to consist of twenty-five with power to add to their numbers. That each of the three prairie provinces be represented on this board, besides others, by at least one woman; this board to have power to call annually, and at such other times as it may be decided in meeting, a conference of representatives, as above stated, to whom it shall report its work and activities. This board also to be charged with the duty of creating a permanent organization, having for its object the furthering in every possible way of the agricultural interests of the three prairie provinces. That ten members of this committee be elected by the conference then in session and to have power to appoint from among themselves a president and secretary and to select other members of the committee.

Committee Appointed.

These resolutions being duly passed, the committee of ten selected were: J. H. Haslam, Regina; Dr. Rutherford, Calgary; J. E. Bradshaw, Prince Albert; S. M. Sclanders, Saskatoon; G. R. Murnoch, Lethbridge; S. C. Burton, Regina; C. A. Dunning, Regina: C. E. Eymann, Regina; T. C. Norris, M.P.P., Griswold, Man.; J. B. Mussulman, Moose Jaw, Sask.

The committee met immediately at the close of the conference and proceeded to organize. J. H. Haslam, of Regina, was made president; Dr. J. G. Rutherford, of Calgary, vice-president, and C. E. Eymann, of Regina, secretary. Mr. Eymann, it might be stated, is the editor of the *Courier*—a German weekly published in Regina. He was of great service at the conference, not only in giving experiences and ideas with regard to the Foreign Communities, but in translating for the benefit of foreign delegates who could not always follow the rapid speeches in English. J. B. Musselman, secretary of the Grain Growers' Association of Saskatchewan, who speaks German fluently, stated afterwards that he had never heard a more unbiased and impartial report than that given by Mr. Eymann in German.

While the balance of the committee has not yet been fully selected, some little progress has been made with drafting the proposed work of the Canadian Rural Advancement League. It will be divided into a number of sections—colonization and immigration, live stock, grain growing, agricultural credits, woman's department of rural life, distribution and some others. The first work of the section of colonization and immigration will be to devise some scheme which will as quickly as possible bring vacant lands under civilization. It is realized by all that the present system has fallen down and that there must be something to take its place. The Regina Board of Trade, since it announced this conference, has been daily in receipt of letters from thoroughly capable and trained workers willing to go on the land, but without the necessary means to do so, and also numbers of men in the United States who have been working for some years in the copper mines and steel works and have some money and who are anxious to get on the land. Many of these men have had some very considerable agricultural experience in the European countries from which they come, but would need some instructions, and the committee will seek the thorough co-operation of farmers in some plan whereby these men can be helped to farm, so that the little means they have will be utilized to the best ability.

The section which will take up the matter of agricultural credit will no doubt start a propaganda to educate the people to the necessity of co-operative borrowing and the meaning of co-operation in everything. In every country but Canada, where agriculture is the main business and is prospering, there are means provided for the farmer obtaining the necessary credit to carry on his operations at a low rate of interest, and the Canadian West must have it before it will be on the road to success.

Hard Work for This Section.

The section which will deal with the problems of rural life will have no small task. Western farm life has borne particularly heavy upon the women, and something will have to be done to make life broader and sweeter to them before there will be any permanent prosperity among rural communities. Hon. Geo. Brown, in the course of his address, said that farm life stunk in the nostrils of the farm women from the Atlantic to the Pacific, and though this is perhaps too strong a statement, it has a great element of truth in it. Every school house in the West should be a social centre. There should be libraries, but above all there should be some provision made for supplying nurses in times of illness at a price which the ordinary settler can afford to pay, or without payment at all in cases of extreme poverty. This could possibly be best done through municipal councils. Isolated districts where nurses have been financed by voluntary contributions have proved the enormous value of a nurse in a community. There should be some means whereby

nurses could be guaranteed a minimum amount to live on by the municipality or some other organization, and allow that amount to be supplemented by what settlers are able to pay. Better markets for the things which women produce on the farm, such as poultry, eggs, etc., and better roads so that they may more easily get about, are a few of the things which the committee having in charge the questions of rural life will no doubt take up.

It was felt by all present that the Regina Conference was a great success. The fact that it failed to endorse the scheme which it had been called together to discuss had not the slightest bearing on the matter. The important gains were the marvellous increase of sympathy and understanding between urban and rural dwellers, and perhaps best of all the sympathy and understanding which developed between the English and non-English delegates.

The Canadian Rural Advancement League has a wide field before it and many stiff problems to solve, but it is an advanced step, and though it will not realize all its promotors hoped for it will undoubtedly do much good. It is the hope of this western league that similar leagues will be established in the other provinces of Canada, and the whole movement should receive the prompt and hearty endorsement of every association and individual interested in the true advancement of Canada.

THE WOOL QUESTION IN CANADA.

On the wool question, Mr. J. P. Murray, formerly manager of the Toronto Carpet Company, who has been connected for many years with the wool industry, writes to INDUSTRIAL CANADA as follows:

"The question 'Can Canada grow sheep?' has been answered at mostly every international sheep fair, at which Canada has taken over ninety per cent. of the prizes. From the failure in past policies for inducing an increase in sheep-growing there should be no objection to try a cash policy. The policy suggested is, to bring the wool to an assembling shed where its actual value will be determined, its condition being a factor in valuing, and a negotiable document given for value so found. By this the grower will be relieved of the kind attention of the middlemen, who will eventually have to deal with the wool expert of the assembling shed. This wool expert and valuator, being an independent between grower and buyer, may improve his income and importance in the community in ratio as he increases the growth of wool in his district. In him the grower has a near-by instructor and adviser. Any problems the expert cannot solve he will send to the nearest Agricultural College.

"For years theoretical and technological information has been handed out by volumes. Suppose immediate practical demonstration was given a chance? Would it pay? Has any grower any knowledge as to the usefulness of his wool? What will it make? What quantity of it is needed? Is there a wool imported which competes? If so, what does it cost laid down, say in Toronto?

"Suppose there are cloth mills at Lanark which use 100,000 pounds of one grade of a wool which could be grown within a radius of fifty miles. Allowing six pounds of wool to a sheep, and at that there is a loss in cleaning it would take over 20,000 sheep. Allow 12 cents a pound for the net cleaned wool, and that district would be better off by $12 000 plus what will be received for the mutton, tallow, casings, skins and the bones which now have an increased value. If the user of that 100,000 pounds of wool imports it, but which the farmer could grow at a profit but does not, why should he rank as an objector to the importation? The Government has prepared the system whereby the farmers of a district may form associations for the marketing of their wool. Under this system the advantages to the grower can be made many. The results will be that he can grow wool at a profit and get a great deal of valuable education at no cost. You may ask, 'Then who pays the cost?' As it is now the grower sells for what he can get, and gets no help or encouragement. Under the new method, as he gets the value of his wool he can afford to, and will, allow the commission which will cover all overhead charges. He is doing that exorbitantly for the middleman now. By this policy, government encouragement practically and immediately gives a benefit to the sheep raiser and brings him—as a wool grower—into more immediate relation with the user of his wool."

PULP PRODUCTION IN CANADA.

The forty-eight pulp manufacturing firms reporting in 1913 to the Forestry Branch of the Department of the Interior consumed in their mills a total of 1,109,034 cords of pulpwood, valued at the mill at $7,243,368. A total of 1,035,030 cords of unmanufactured pulpwood, valued at $7,070,571, was exported from Canada to the United States during the same year, bringing the total production of pulpwood to 2,144,064 cords, valued at $14,313,939.

The quantity of pulpwood consumed in Canadian pulp-mills in 1913 was an increase of 28.1 per cent. over that of 1912. The average price of raw pulpwood at the mill increased by 51 cents a cord, making an increase of 38.9 per cent. in the total value of the raw material used in this industry.

Quebec and Ontario still led the other provinces in 1913, as in 1912. British Columbia displaced Nova Scotia from fourth place on the list in 1912 and displaced New Brunswick from third place in 1913. This province now consumes 7.6 per cent. of the pulpwood used in Canada, and will probably increase this proportion in the future, as the pulp industry on the Pacific coast is still in its infancy. There was an increase in consumption in every province but Nova Scotia, where the closing of four mills resulted in a decrease of 21.4 per cent. The increases were: Quebec, 8.8 per cent.; Ontario, 84.7 per cent.; British Columbia, 140.0 per cent.; New Brunswick, 2.1 per cent.

The average cost of pulpwood at the mill in Canada in 1913 was $6.53, an increase of 8.5 per cent. from 1912. The cost increased in Quebec, Ontario, New Brunswick and Nova Scotia and decreased in British Columbia.

These reporting pulp manufacturers in 1913 operated altogether 64 different pulp-mills. These firms each used on an average 23,105 cords of wood, as compared to 18,042 in 1912. Each one of the individual 65 mills consumed an average of 17,062 cords of pulpwood. The largest individual mills are situated in British Columbia, where the average mill consumption was 28,058 cords. Quebec has the greatest number of mills, and the average consumption of these was 18,527 cords. The average mill consumption in the other provinces was as follows: Ontario, 18,897 cords; New Brunswick, 13,280 cords; and Nova Scotia, 5,140 cords.

MOCCASINS FOR SOLDIERS.

The British war office is considering the use of long moccasins, such as are used by Canadian lumbermen, for the men at the front this winter. The moccasins as manufactured in Canada are waterproof, and with heels and heavy soles attached would likely prove a great boon to the man bearing the brunt of the fighting. Many orders for such moccasins have already been received from the men in the Canadian contingent.

THE MANUFACTURES WE EXPORT

And the Proportion They Bear to Our Total Production

(Weekly Report, Trade and Commerce)

CANADIAN manufacturers export considerable quantities of finished and partly finished goods. The following table shows: (1) Our total production in certain lines; (2) the proportion exported. This table is the most effective reply to those who say that we have not achieved any considerable advantage in the world's markets.

NOTE.—Difficulty arises in some cases in adjusting Customs classification of exports to Census classification of production. The statistics in the first column are taken from the last Census, those in the second from the Customs Returns for last year.

Kind of Industry.	Establishments. No.	Value of Products. $	Exports of Canadian Products, 1914. Export Classification.	Total Exports. $
Aerated and mineral waters	128	2,808,230	Mineral and aerated waters in bottles	1,384
			Mineral water, natural, not in bottles	610
Agricultural implements	77	20,722,722	Agricultural implements:—	
			Cultivators	182,953
			Drills	663,437
			Harrows	126,853
			Harvesters	3,068,797
			Hay-rakes	293,788
			Mowing machines	903,889
			Ploughs	408,883
			Reapers	301,610
			Seeders	1,140
			Threshing machines	712,270
			Other agricultural implements	388,956
			Parts of agricultural implements	879,214
Asbestos	9	468,614	Asbestos, manufactures of	98,274
Automobiles	8	6,251,885	Automobiles	3,571,862
Automobile repairs and accessories	11	170,930	Automobile parts	235,857
Awnings, tents and sails	26	1,342,436	Awnings, tents, sails, tarpaulins	1,692
Baking powder and flavoring extracts	22	963,090	Baking powder	15,386
Blacking	13	691,029	(Not specified under this heading in Customs classification).	
Boats and canoes	126	1,417,210	(Not specified under this heading in Customs classification).	
Boilers and engines	71	11,873,903	Gasoline engines	88,266
Boots and shoes	180	33,987,248	Boots and shoes:—	
			Of leather	82,529
			Of rubber	170,852
Boot and shoe supplies	14	1,025,878	(Not specified under this heading in Customs classification).	
Brass castings	36	3,093,006	(Not specified under this heading in Customs classification).	
Brass and iron beds	8	1,212,550	(Not specified under this heading in Customs classification).	
Bread, biscuits and confectionery	323	25,566,691	Bread, biscuits and confectionery:—	
			Biscuits and bread	16,227
			Confectionery	43,996
Bricks, tile and pottery	399	8,291,561	Bricks, tiles, etc.:	
			Bricks	8,454
			Clay, mfrs. of	36,628
			Earthenware	13,012
Brooms and brushes	35	1,731,523	Brooms, whisks, brushes	29,720
Butter and cheese	3,625	37,232,969	Butter and cheese:—	
			Butter	309,046
			Cheese	18,868,785
Calcium carbide	5	515,457	Calcium carbide	161,026
Carpets	6	1,971,500	(Not specified under this heading in Customs classification).	
Carriages and wagons	287	11,766,882	Carriages, etc.:—	
Carriages and wagons, materials	37	3,172,652	Carriages	37,232
Cars and car works	15	16,630,634	Carriages, parts of	34,687
			Carts	51,093
			Wagons	9,406
			Other carriages, cars, etc.	55,945
Cement blocks and tiles	84	1,921,687	(Not specified under this heading in Customs classification).	
Cement, Portland	21	5,683,036	Cement	2,393
Chewing gum	8	816,069	(Not specified under this heading in Customs classification).	
Clothing:—				
Custom—Men's	330	8,724,063	Clothing and wearing apparel	446,524
Women's	238	5,943,997		
Factory—Men's	225	25,020,865		
Women's	93	15,083,345		
Cocoa and chocolate	6	1,193,486	(Not specified under this heading in Customs classification).	

Kind of Industry.	Establishments. No.	Value of Products. $
Coffees and spices	25	3,274,711
Coffins and caskets	22	1,447,358
Coke	5	1,460,028
Condensed milk	11	1,814,871
Cooperage	113	2,409,577
Cordage, rope and twine	9	3,624,113
Corsets and supplies	11	1,572,105
Cottons:—		
Bags	10	5,722,478
Other manufactures of cotton	26	24,584,931
Cream separators	4	639,656
Drugs, chemicals, etc.:—		
Drugs	40	3,632,794
Patent medicines	37	3,214,939
Electric apparatus and supplies	47	15,021,841
Elevators	10	1,506,756
Explosives	7	2,168,500
Fertilizers	10	643,733
Fish, preserved	1,521	12,309,237
Flax, dressed	30	548,559
Flour and grist mill products	1,141	82,494,826
Foods, prepared	11	507,070
Fruits and vegetables:—		
Canned	82	5,971,082
Evaporated	65	448,929
Furs, dressed	6	1,973,000
Furnishing goods, men's	53	6,964,137
Furniture and upholstered goods	172	12,369,366
Glass:—		
Mirrors and plate	15	897,972
Stained, cut and ornamental	21	1,006,266
Other glass	9	2,269,158
Gloves and mitts	35	2,995,356
Glue	8	584,766
Hardware, carriage and saddlery	4	952,050
Harness and saddlery	57	5,205,455
Hats, caps and furs	139	11,155,103
Hoisery and knit goods	68	13,393,854
Inks	12	568,255
Iron and steel:—		
Bridges	11	6,502,410
Foundry and machine shops	514	45,611,416
Iron and steel products	89	34,613,710
Lock and gun-smithing	6	304,709
Safes and vaults	3	460,070
Scales	8	506,028
Smelting (all metals)	18	33,669,700
Wire	13	2,882,166
Wire fencing	19	2,608,907

Exports of Canadian Products, 1914.

Export Classification.	Total Exports. $
Coffee	11,517
(Not specified under this heading in Customs classification).	
Coke	332,685
Condensed milk and cream	666,941
Cooperage:—	
Barrels, empty	14,228
Staves and headings	70,249
Cordage, rope and twine:—	
Binder twine	453,530
Cordage, etc., all other	60,127
(Not specified under this heading in Customs classification).	
Cottons:—	
Fabrics	82,636
Other	24,591
Cream separators	17,090
Drugs, chemicals and medicines:—	
Acetate of lime	316,481
Acid, sulphuric	37,413
Lye	70,584
Phosphorus	88,521
Senega root	245,870
All other drugs, etc.	768,883
Electric apparatus	106,816
(Not specified under this heading in Customs classification).	
Explosives:—	
Cartridges, gun, rifle and pistol	13,353
Explosives and fulminates	228,312
Fertilizers	2,539,789
Fish, canned, etc.:—	
Herrings	1,834
Lobsters	2,983,987
Salmon	6,631,437
Other sea fish	145,144
Flax:—	
Flax	46,369
Hemp	190
Tow	3,267
Grain products:—	
Bran	1,789,939
Cornmeal	14,639
Oatmeal	488,589
Wheat flour	20,581,079
Other meal	7,534
Cereals, foods, prepared	2,166,330
Fruits:—	
Apples, dried	411,789
Dried fruits, N.O.P.	352
Canned or preserved	394,719
Vegetables, canned or preserved	17,655
Furs, dressed	11,550
(Not specified under this heading in Customs classification).	
Household furniture, wood	411,074
Glass and glassware:—	
Lamps and lanterns	11,268
Other glass	32,453
(Not specified under this heading in Customs classification).	
Glue stick	26,719
Hardware	94,702
Harness and saddlery	21,288
Hats, caps and furs:—	
Fur, manufactures of	53,070
Hats and caps	21,521
(Not specified under this heading in Customs classification).	
(Not specified under this heading in Customs classification).	
Iron and steel:	
Castings	46,648
Gas buoys and parts of	18,832
Guns, rifles and firearms	130,568
Pig iron	347,347
Scrap iron or steel	458,800
Stoves	20,618
Other iron and steel	968,074

Kind of Industry.	Establishments. No.	Value of Products. $
Jewellery and repairs	58	3,124,272
Leather goods	30	2,402,304
Leather, tanned, curried and finished	113	19,972,178
Lime	52	753,421
Liquors:—		
Malt	100	12,468,500
Vinous	13	363,200
Distilled	11	12,064,459
Malt	8	1,232,393
Matches	4	349,337
Mattresses and spring beds	52	2,932,051
Metallic roofing and flooring	7	1,874,238
Mica, cut	13	383,934
Musical instruments	42	6,120,912
Musical instrument materials	8	920,494
Oils	29	7,682,510
Paints and varnishes	26	8,041,154
Paper:—		
Boxes and bags	54	3,361,023
Cardboard	7	506,077
Patterns	6	272,335
Wall paper	4	1,115,290
Other paper and mfrs. of	35	14,109,014
Plumbing supplies	17	2,283,630
Printing and publishing	434	13,323,294
Pumps and windmills	29	1,613,222
Roofing and roofing material	23	2,778,182
Rubber clothing	17	1,189,930
Rubber and elastic goods	11	5,849,271
Sewing machines	4	974,490
Ships and ship repairs	43	5,136,257
Silk and silk goods	4	1,009,476
Slaughtering and meat packing	70	41,208,796
Slaughtering, not including meat packing	10	7,318,280
Soap	22	5,220,546
Starch	11	1,744,381
Stationery goods	22	1,423,972
Sugar refining	8	21,260,011
Thread	3	1,096,000
Tobacco:—		
Cigars and cigarettes	153	17,344,543
Chewing, smoking and snuff	20	7,984,780
Tools:—		
Axes and tools	30	2,549,764
Files	3	226,400
Saws	11	879,476

Exports of Canadian Products, 1914.

Export Classification.	Total Exports. $
Jewellery	113,589
Trunks and valises	22,404
Manufactures of leather, N.O.P.	42,538
Leather:—	
Sole	2,336,491
Upper	113,916
Other	617,179
Lime	28,610
Liquors:—	
Ale and beer	3,530
Wines	4,408
Spirits:—	
Whiskey	1,038,365
Wood alcohol	256,869
Other spirits	3,294
Malt	4,256
Matches	334
(Not specified under this heading in Customs classification).	
Metallic shingles and laths and corrugated roofing	161,404
Mica	208,526
Musical instruments:—	
Organs	144,620
Pianos	51,408
Other and parts of	86,679
Oils:—	
Creosote	59,186
Fish	447,752
Mineral	7,774
Neatsfoot and other animal	247,143
Other	174,392
Paints, etc.:—	
Mineral pigments, iron oxides, ochres	19,638
Paints and varnishes	133,356
Paper:—	
Films for photographers' use, etc	11,860
Felt paper	50,131
Printing	11,386,845
Wall	45,328
Wrapping	615,310
Other paper	577,422
(Not specified under this heading in Customs classification).	
Books, pamphlets, maps, etc.	496,579
(Not specified under this heading in Customs classification).	
(Not specified under this heading in Customs classification).	
Rubber clothing	11,402
Rubber goods:—	
Belting	5,475
Hose	9,379
Other	75,170
Sewing machines	98,648
Ships	128,493
Silk and mfrs. of	26,880
Meats, etc.:—	
Lard	11,519
Meats:—	
Bacon	3,763,195
Beef	1,127,908
Canned	94,961
Hams	269,911
Mutton	10,804
Pork	202,391
Other	266,879
Soap	27,400
Starch	7,927
Stationery	67,211
Sugar of all kinds	126
(Not specified under this heading in Customs classification).	
Tobacco:—	
Cigars	1,373
Cigarettes	203
Stems and cuttings	55,685
Other tobacco	7,773
Tools:—Hand and machine	106,617

Kind of Industry.	Establishments. No.	Value of Products. $
Umbrellas	7	609,500
Vinegar and pickles	30	1,408,934
Washing machines and wringers	4	420,400
Wood:—		
Boxes, cigar	4	283,485
Boxes, other	119	3,386,327
Lumber products	859	39,805,615
Shooks, box	11	2,350,675
Wood pulp	37	9,117,465
Woodenware	7	360,114
Woollen goods	87	5,738,773

Exports of Canadian Products, 1914.

Export Classification.	Total Exports. $
(Not specified under this heading in Customs classification).	
Vinegar	82
Washing machines, domestic, and wringers	27,504
Wood:—	
(Not specified under this heading in Customs classification).	
(Not specified under this heading in Customs classification).	
Lumber:—	
Deals, pine	1,408,709
Deals, spruce and other	6,547,854
Deals, ends	294,195
Laths	1,699,221
Pickets	206,573
Planks and boards	19,514,128
Scantling	1,264,881
Shingles	1,775,619
Other lumber	301,670
Shooks	119,777
Wood pulp:—	
Chemical	2,923,083
Mechanical	3,441,741
Pails, tubs, churns and other hollow woodenware	4,553
Woollens	81,555

TRANSPORTATION

By J. E. WALSH

THE questions of the installation of sidings from railway lines to industrial plants and the charges for switching cars on and off such sidings are of great importance to Canadian manufacturers. The interpretation of Section 226 of the Railway Act, which governs both these matters, has been under discussion for some years, but was only dealt with exhaustively by the Dominion Railway Board recently. Both problems arose in an application of the Hepworth Silica Pressed Brick Company, Limited, of Hepworth, Ontario, for an Order directing the Grant Trunk Railway Company to construct a spur to the premises of the Applicant Company at Hepworth, Ontario, and complaint against the switching charge of $2.00 per car proposed to be charged by the Grand Trunk Railway Company.

Chief Commissioner Drayton has just delivered the following judgment, which defines the respective positions of the railways and manufacturers in regard to both the installation of sidings and the adjustment of switching charges:

The Judgment.

During the course of the hearing, the Railway Company contended that a rate of $2.00 per car should be allowed for all cars moved over the switch in question, and argued that, in the absence of such a rate, no rebate could be ordered by the Board as contemplated by Section 226, owing to the fact that there would be no fund out of which the rebate could be paid. At the close of the hearing, my judgment, delivered in brief, was as follows:

"As I have said, we do not think—perhaps entirely incorrectly as you submit, Mr. Chisholm—that we can deal with the general question which you really are raising, on a single issue of this kind."

"It would be entirely unfair to start out with a peculiar charge, a new charge as against this particular industry, which has shown on material which is not really challenged by the Railway Company, that it is entitled to a switch under the provisions of Section 226 of the Act. If we did that, we would be according one class of treatment to the rest of the people engaged in the brick business and another to this company."

"On the other hand, nothing which we will do to-day will have anything to do, one way or the other, on a proper application, to prejudice your railway in asking that it shall be allowed a proper switching charge having regard to the length of this particular switch."

"We, therefore, think that an Order should be made under Section 226 of the Act, that is, the Section under which we can compel the Construction; and that Order is not an Order which deals with the whole cost of construction. In the forced section, that is the only Order we can make."

"An Order will, therefore, go for the construction under Section 226, with a further modification of the terms which the parties have said were discussed; the question as to refund is a matter entirely for the Board under that section. This is a comparatively long switch, the traffic moving takes a low rate, so that, under the circumstances, instead of asking the Railway Company to rebate at the rate of $2.00 per car, the Company will rebate at the rate of $1.00 per car."

Fuller Reasons in Detail.

In view of the importance of the issue, fuller reasons for the action of the Board should now be given.

The clause under consideration, Subsection 3 of Section 226, first appeared in the Railway Act, 1903, as Section 176, Subsection 2. Before the legislation many sidings of the character in question had been installed as matters of agreement between the railway companies and shippers interested. While there may be isolated cases which have been overlooked by the Traffic Department, that Department reports that the tolls

which were invariably charged were tolls based upon the transportation service as a whole, without any attempt in any case being made to collect a charge for the so-claimed additional railway service.

The railway practice and the service afforded shippers at the time the legislation in question was enacted required the construction and operation by Companies of freight spurs, sheds, and team tracks, as well as the breaking-up and sorting yards adjacent to the respective terminals. In so far as the breaking-up and sorting yards are concerned, these were necessary for the work of the railway, apart entirely from any direct service to shippers, who, speaking generally, have no access to them either for loading or unloading at such points. The cars being segregated, they are distributed to different points at the terminal to which they are ordered—some of them to team tracks, some to industrial tracks, and others to freight sheds or stock yards. Team tracks and freight sheds have to be provided and maintained by railway companies as part of the necessary facilities they are bound to provide, and they must be reasonably adequate and sufficient. The industrial tracks are in effect substitutes for team tracks in so far as the heavier classes of merchandise are concerned; and they take the place of freight-shed accommodation for the higher grades of merchandise. Their installation, laid as they are upon the property of the shipper, is, therefore, in case of the public team tracks and freight-shed accommodation. Their operation does not of necessity constitute any additional railway service. Apart entirely from the saving that results to the company from its being able to use its own facilities for the purpose of other business, in some cases the actual mechanical operation is cheaper, while in others, of course, owing to the length of the spur, it would be more expensive. In the same way, the handling of business within a terminal entirely on company-owned facilities varies very much. The Montreal and Toronto terminals cover in their switching area many miles of track. Some deliveries mean a great deal of switching and engine work, while others are attended with a very small cost. In Ottawa, for example, the Grand Trunk has its freight yard and some of its public team tracks at Elgin Street. In a movement from Montreal consigned to the Eddy Company, the car must, in the first instance, be taken to this yard and afterwards shipped to the Company's public team delivery tracks adjacent to the Eddy works, involving an extra movement of over two miles at the same toll as in the case of a delivery at Elgin Street. The switch in question is shown on the plan to be 4,200 feet in length.

Subsection 2 of Section 284 is as follows:

"Such adequate and suitable accommodation shall include reasonable facilities for the junction of private sidings or private branch railways with any railway belonging to or worked by the company, and reasonable facilities for receiving, forwarding, and delivering traffic upon and from those sidings or private branch railways, together with the placing of cars and moving them upon and from such private sidings and private branch railways."

From this, it will be noted that the duty of placing cars and moving them upon and from private sidings is placed upon the railway company.

Practice in England.

It has been held in England that it is only a reasonable facility; that a company should be willing to run over a portion of a foreign line to collect traffic where such line has been conveniently planned for its access to it, and where the company has no reserve line of its own; and where traders had laid down sidings adjoining a railway company's line and had made junctions with that line, with the approval of the company's engineer, the commissioners considered that, after they had brought their trucks (six cars) as near to the main line as they could with safety, and had arranged them in proper order, they were entitled to have them taken off by the company without extra payment. The English practice, however, does not seem to be a matter of much importance, owing to the fact that it is based upon an entirely different statute. In England, the cost of the industrial siding is entitled to receive an allowance or rebate on the traffic moving over this siding, because the railway company does not, in that instance, provide station accommodation or perform terminal services (57 & 58 Victoria, Chapter 54, Section 4).

Fixing the Rebate.

There is not much difficulty in arriving at the amount of the rebate to be allowed, as, under the established railway practice in England, freight rates are divided into two amounts—that charged for the line haul, and the sum of the station terminal rates.

The English statute defining the obligation of the railway company as to the facilities to be furnished with respect to private sidings (4 Edward VII, Cap. 19), closely follows the corresponding section in our Act (Sec. 284, ss. 3), except that the statute does not in terms require the railway company to place cars upon and move them from a private siding.

As to the nature of the service, reference may be had to Interstate Commerce *et al.* vs. Atchison, Topeka, & Santa Fe Railway *et al.* (Judgment of Supreme Court of the United States delivered June 8th, 1914).

In Canada railway companies' tariffs include not only the line haul rate from destination to destination, but also cover the railway services in receiving and delivering merchandise at team tracks or in freight sheds expressed in a lump sum.

The result of a special charge for working the substituted facility, which, as already pointed out, may or may not be more expensive, would in effect—at least, in many instances—be a direct increase in the transportation charge.

In the case of Grand Trunk Railway Company v. Christie, Henderson & Co. (9 C.R.C. 502), at the time the switch was ordered, provision was made for the payment of a switching charge of $3.00 a car. At a hearing, the railway company relied on an Order made in the case of the Pilon spur on the Canada Atlantic Railway; and, in a reserved Judgment, delivered by the late Chief Commissioner, the Honorable Mr. Justice Mabee, it is stated that—

"When the Board made the Order requiring the Company to put this spur in, provision was made for the payment of a switching charge; but there was then no information furnished to the Board that it had been the custom of the company for many years to perform the like service without making an extra charge,—the law requires all to be treated alike, and it is absurd for the Board to require Messrs. Christie, Henderson & Company to make payments for services that the railway makes no charge for at other industrial plants."

The length of the haul in the Pilon case was two and a half miles from the station, and, by a later judgment of the Board, the switching charge complained of by Pilon was disallowed (Pilon v. Grand Trunk Railway Company, 16 C.R.C. 433).

These decisions do not mean that railway companies are not entitled to collect the full mileage rate, but simply that an arbitrary charge shall not be made as against "A," while, under similar circumstances, no such charge is made against "B."

As a matter of fact, however, in the case of these comparatively outlying spurs, the exact mileage rate is often not of real importance.

The Material on which Question Arose.

Brick, the merchandise manufactured by the Applicants, always moves under commodity tariffs. Such tariffs are as a rule put in voluntarily by the railway companies, on the application of manufacturers, and are made from the point of manufacture to points towards which business moves in sufficient quantity to justify the making of special rates.

Since the hearing on June 19th the Grand Trunk Railway Company issued Supplement 209 to C.R.C. No. E-2552, effective June 30th, 1914. This tariff, among other rates, gave a commodity rate of 6½c. per 100 lbs. on building brick (except enamelled or glazed) from Hepworth, where the Applicant's factory is situated, to Toronto, and one of 12½c. from Hepworth to Montreal; and, on September 17th, 1914, the said Company issued Supplement 248 to C.R.C. No. E-2552, giving a commodity rate of 7c. per 100 lbs. on building brick (except enamelled or glazed) from Hepworth to Waterloo,—the said tariff to become effective September 21st, 1914.

In voluntarily making these tariffs, the railway company undoubtedly thought that the rates, which are but slightly related to the mileage rate, were necessary in order to create traffic for its lines, or else that, in view of commodity rates already granted by it to other brick manufacturers, the neglect to extend them in these cases would constitute an unlawful discrimination.

The result is that the railway company may be driven to atttempt to make a special charge for services on spurs of the class in question. The merits of such a charge can properly be passed on only after appropriate tariffs have been filed, and the different interests involved have been heard by the Board.

The Practice of the Board.

The practice of the Board, therefore, as well as the practice of the railway companies, since the section in question was enacted, is similar to the practice of the railway companies before that time. The section itself reads as follows:

" The aggregate amount so paid by the applicant in the construction and completion of the said spur or branch line shall be repaid or refunded to the applicant by the company by way of rebate, to be determined and fixed by the Board, out of or in proportion to the tolls charged by the company in respect of the carriage of traffic for the applicant over the said spur or branch line."

The Board has construed this section in the past as obligatory, and has, therefore, invariably ordered refunds to be made as contemplated. These refunds have varied from time to time and have been based upon a percentage of the earnings, or more frequently upon a direct allowance per car,—a refund at the rate of $2.00 a car being perhaps the usual practice. Mr. Chisholm's contention, if correct, would abolish all refunds. His argument, in short, is that, unless the Board allows a special charge to be made for the carriage of traffic over the spur, in addition to that chargeable under the tariffs already in effect, there is no fund from which the rebate can be made. I have been unable to find that the point has ever before been taken. There is no reported case on the subject, nor have I been able to find any unreported case on the Board's files. The question is dealt with in McMurchy & Denison's work on Railway Law, second edition, page 281, as follows:—

" the expense to be repaid to the owner by allowing a rebate upon the freight charges due in respect of every car of freight shipped in or out upon the siding . . . ."

Under the provisions of the Railway Act, tariffs of all railway tolls have, in the first instance, to be filed by the railway companies; and none covering services on a private spur has yet been filed. As has already been pointed out, this practice has not obtained; a charge has not yet been made and was not made at the time the legislation was enacted. The result is that if the right to rebate is limited to cases where a toll is charged for the movement on the spur, the provision as to rebate is entirely idle, and inoperative, and of no effect. Bound, as I am under the authorities, to give effect to the statute, if the wording thereof admits of such a course, I find that the right to rebate is not thus limited, and that the effect of the statute is only to limit rebates to freight charges due on cars which have passed over the spur in question, with the right to the Board to order rebates either in proportion to the amount of the tolls charged or by a fixed charge per car. The limitation, if I may say so, is also reasonable and proper. Large plants frequently have different methods of getting their produce in and out, and it would be entirely unfair to compel a railway company to rebate to such an industrial concern the cost of a spur which it might never use.

The Chief Commissioner's Opinion.

I am of opinion that the object of the statute was to compel railway companies to furnish the facility, instead of leaving the construction of spurs entirely to the discretion of the companies, under the section requiring them to place all traders on an equal basis—the basis of those already favored; and this basis was, as pointed out, not subject to any especial or arbitrary charge for the use of the spur. While effecting this object, Parliament protected the carrier; for, if it turns out that there was not sufficient business to warrant the construction of a spur and that traffic does not move over the spur after construction, the loss is on the trader and not on the carrier.

MR. WISNER ELECTED.

At a meeting of the board of directors of the Massey-Harris Co., Charles L. Wisner was elected to the board of directors, in place of the late J. H. Houser.

BOOKS FOR EXPORTERS.

Books recommended as useful to a new exporter:

Export Trade Directory, Johnston Publishing Company, 17 Battery Place, New York.

Steiler's Atlas of Modern Geography—English edition. Brentano's, New York.

Directory of the Merchants, Manufacturers and Shippers of the World. Customs Tariffs of the World. Two volumes. Kelly Publishing Company, 5 Beekman St., New York.

Exporter's Encyclopedia, 17 Battery Place, New York.

Exporter's Encyclopedia, 17 Battery Place, New York.

Elementary Lessons in Exporting, by Emerson Hough. Johnston Publishing Company, 17 Battery Place, New York.

Import and Export Trade and Modern Commercial Practice, by Hooper M. Graham. National Association of Manufacturers, 30 Church St., New York.

—*The Dodge Idea.*

SHIPPING GOODS TO RUSSIA

By S. B. BROWN

AT the present time the only Russian port open to shipping is Vladivostok, in Siberia. It is the intention, however, to endeavor to keep the port of Archangel in the Arctic Sea open all winter, and a service from New York will be operated by the Russian-American Line, 10 Bridge St., New York.

Shipments to Vladivostok may be routed via either Vancouver or New York.

Via Vancouver: The Russian volunteer fleet inaugurated a service between Vancouver and Vladivostok on November 19, and the Canadian Pacific Railway are endeavoring to secure a tonnage for this service and would be glad to quote rates (which they state will be on as favorable a basis as via New York) upon application to any local agent of their road. The idea is to operate a monthly service between Vancouver and Vladivostok calling at Chinese and Japanese ports eastbound (to Vancouver) and Yokohama westbound (to the Orient).

Rates via New York.

Via New York: The United States and China-Japan Steamship Line, Barber & Company, and American-Asiatic Steamship Company of New York announce expected sailings of twice a month to Vladivostok. The rate quoted by these three lines on the following articles is 60/ per 40 cu. ft. or 2240 lbs., ship's option, freight prepaid. One Line—Barber & Company —ask 5% additional for primage.

Agricultural implements, Machinery, Paper manufactures, Engines (gas, naphtha and steam), Mechanics' tools, Lubricating oils, Pumps, Sewing machines, Cordage, Typewriters, Pottery, Glassware, Furniture, Automobiles and bicycles, Cast iron and Tin ware, Leather goods, Rubber goods.

The Exporters' Encyclopaedia states that a commission appointed by the Russian Government has recommended the building of lines amounting to about 20,000 miles in length during the next five years. The proposed railways are divided into three groups, comprising main, connecting and auxiliary lines, and their object is to reduce the distance between the chief centres of the country, such as Moscow, St. Petersburg, Riga, Warsaw, Kieff, Odessa, Kharkoff, Rost-on-Don, Baku, and the principal seaports, and also to render accessible various territories which hitherto have not been provided with adequate transport facilities.

Development on Pacific Coast.

The Russian government is taking in hand several important undertakings in the Russian Far East, notably the equipment of Vladivostok Harbor, where accommodation is to be provided for not less than twenty-five ocean-going vessels. A complete project to equip the port with cranes, repairing shops and electric plant has been formulated, and also to provide railway communication between the new wharves and the main line. The cost of the harbor extensions and railway facilities will be about $5,000,000, and the period of construction will be five years. A sum of $79,000 has been allotted for the building of a power station. Other proposals now being investigated include water supply, sewerage, the dredging of the approaches to the Amur, and the improvement of the means of communication. On all sides there are signs of a policy to develop this part of Siberia, and recently there has been a demand for brickmaking and refrigerating machinery, crucible steel, lathes and workshop equipment, engines for motor boats, portable engines, and corrugated and flat iron sheets.

RUSSIAN IMPLEMENT TRADE PROSPECTS

TACKLED properly, the Russian market alone—after allowing for American and other competition—should produce orders sufficient to increase our export trade by somewhere near 75 per cent. And the Russians will be waiting for us. As one of our allies in this war against Germany's arrogant aggression Russians will welcome with open arms the representatives of British firms. Already British goods have the reputation, won by years of honest work, of being the most substantial, and if manufacturers will combine and send out representatives who can talk the language, who thoroughly understand the goods they have to sell and the work to which they apply, and who are furthermore empowered to accept orders, even though the pattern may have to be modified to meet Russian requirements, there will be no doubt as to the result.

One difficulty in the way of such a combination is, of course, the fact that, unlike the cotton and woolen industries, which are largely confined to certain groups of towns and localities, the manufacture of agricultural machines and implements is scattered all over the country from Aberdeen in the north, through Leeds, Grantham and Bedford, to Ipswich in the south; and from Norwich in the east to Barnstaple in the west—embracing altogether some thirty or forty far-divided towns. But some firms are powerful enough either to send out their own representatives, or near enough to one another to combine in their own localities to bear the cost; and smaller firms might, at least, act co-operatively in like manner, just as a group of steel manufacturers of Sheffield have co-operatively agreed to send agents into all the Russian markets where Germany has any foothold. The larger firms named have another incentive to such co-operative effort, because they are in every case makers also of agricultural and road locomotives for hauling, ploughing and threshing, the value of Germany's export of which to Russia last year—in addition to the figures named above—reached the high total of £334,000, against British exports of only £18,700.

Russia Must Have the Goods.

The agricultural development of Russia during the last twenty years is one of the most striking features of her national life, with the result that the demand for all manner of agricultural implements, from steam and internal combustion engines and tractors down to hoes and forks, shows an annual upward tendency despite the action of the Russian Government in giving a premium to home manufacturers on the output of their factories. Years must pass before Russia can supply her own demands. She has scarcely yet awakened commercially. Her population is largely pastoral, and years of training will be necessary before her people are blessed with the nimble fingers of British industrial workers. Here and there individual firms are establishing factories, but the

lack of system and knowledge of economic management is obvious in every one of them. Thus far the best they can do is to turn out the simpler implements—ploughs, drills, reapers, mowers and horse threshers. In none of them has there yet been installed plant for the construction of the more delicate and complicated machines, such as self-raking and self-binding reapers, multiple ploughs and drills, steam threshers, or pulping, slicing and chaffcutting machines. We have, it is true, in British hands the bulk of the trade in threshing machines (again not included in any of the above figures), from which neither German nor American competition has been able to oust us, but there is no reason why a greater proportion, if not, indeed, the bulk of the trade in all these other agricultural appliances should not also come into our hands.

Russian Requirements.

To get it, however, we must supply what the Russians want. For instance, swing ploughs, though almost exclusively used in England and therefore offered by English makers, are not at all favored by Russian farmers, and very few of them are used. The Russian prefers to have a plough which he can put into the ground and leave to itself while he walks beside it till he reaches the end of the furrow. Practically all ploughs in Russia are therefore fashioned according to the Sock and Eckert (German) type. As it is with ploughs so it is with other implements. The Russian has his likes and dislikes, and whether they appear to us to be nonsensical or not it is his likes that our manufacturer should strive to meet. Moreover, as the Vice-Consul at Omsk, in Siberia, suggests, catalogues should be printed in the Russian language, the weights quoted should be in kilogs or pouds, the price in roubles and their units, so that the dealer is able to calculate easily the cost delivered of the goods he may be inclined to order.

Such requirements are in no way beyond the power of British manufacturers to compass, and there is no reason why they should not seriously make the attempt.—British Board of Trade Journal.

A NEW FREE HARBOR.

In accordance with a Royal Decree promulgated some time ago, a free harbor has been created in the port of Cadiz, Spain, where all kinds of goods, foreign and Spanish, can be warehoused in future and no Customs dues or taxes of any kind will be levied.

BIG CAR ORDERS.

Two large equipment orders have just been placed by the Canadian government railways, one with the Eastern Car Company, of New Glasgow, and the other with the Nova Scotia Car Works, of Halifax. The Eastern Car order is for 250 fifty-ton all-steel freight cars for general service, and in value amounts to about $400,000. The Nova Scotia Car Works' order is for 200 all-steel flat cars. Orders for some sleeping cars have also been placed with the Preston Car Co. These orders are in addition to the business recently placed by the government railways with the Canada Car & Foundry Co.

Messrs. Parker & Masterson have been awarded the contract for the installation of electric fittings in the new addition to the Hotel "Dieu" for the Sisters of St. Joseph.

"BUSINESS AS USUAL."

Right from behind the firing line comes the report of the Canadian section of the British Chamber of Commerce at Paris. It contains—

1. Statement of the various branches of the Section's activity in the past.

2. List of the services that they can render to Canadian houses desirous of doing business with France, either in export or import trade.

3. Extract from the French Customs Tariff giving valuable particulars as to the duties leviable on Canadian goods.

A section reads: "There are opportunities of trade in France for certain manufactured articles and also for certain produce. Lumber, fish and mica are items that might be exported to France under certain conditions."

The construction of a cyanide annex to the present mill of the Cobalt Reduction Company has commenced and will be ready in March of next year.

Tenders will be called for the construction of pump house, concrete foundation, brick construction, for Greenfield Park School Commissioners. Machinery for the building has been purchased.

INAUGURATION OF NEW YORK—HAVANA, CUBA SERVICE.

Commencing December 5, 1914, the United Fruit Company inaugurate a direct weekly Freight and Passenger service between New York and Havana, Cuba.

This service will be performed by the new Steamships, "Pastores," "Tenadores," "Calamares" and "Carillo," on the following itinerary:

Leave New York	Saturday, noon.
Arrive Havana	Wednesday, a.m.
Leave Havana	Thursday, a.m. or p.m.
Arrive Colon	Sunday or Monday, a.m.
Leave Colon	Monday or Tuesday, p.m.
*Arrive Bocas del Toro	Tuesday, a.m.
*Leave Bocas del Toro	Tuesday, p.m.
Arrive Port Limon	Wednesday, a.m.
Leave Port Limon	Sunday, p.m.
Arrive Colon	Monday, a.m.
Leave Colon	Monday, a.m.
Arrive Havana	Thursday, p.m.
Leave Havana	Friday, 2.00 p.m.
Arrive New York	Monday, p.m., or Tuesday, a.m.

* Fortnightly call only.

Passengers will be carried between all ports in this service. Direct connections at Colon for Balboa, thence all steamship lines for ports on the West coast of Central and South America.

Cargo will be accepted for Havana, Cuba; Colon and Bocas del Toro, Panama; Port Limon and San Jose, Costa Rica and intermediate stations on the Northern Railway of Costa Rica via Port Limon; West Coast ports of Central America, Mexico and South America via Colon; also northbound cargo from Port Limon, Colon and Havana for New York.

Custom clearance papers should be filed with the Freight Department, on day before sailing of steamer.

For rates and other information apply to the United Fruit Co., 17 Battery Place, New York.

INSVRANCE

OWING to the serious deficiency in the city's water supply, fire insurance rates in Ottawa have recently been considerably increased. Many companies have increased their rates as much as 50c. per $100.00 on manufacturing risks and lumber yards. The Canadian Fire Underwriters' Association also instructed members to accept no more business in Ottawa unless and until the city made immediate purchase of three new steam fire engines as a temporary relief from a possible conflagration, and adopted measures to construct an overland pipe for a more powerful water pressure. At a special meeting of the Board of Control it was decided to call for tenders for the three fire engines.

The Prevailing Crime of Arson.

The firebug is one of the most dangerous of criminals; nevertheless, unless he is caught red-handed in the act, or confesses to his crime, it is almost impossible to secure a conviction. The sympathy of the public, to a greater or less extent, is with the man accused, as the people go on the theory that as the loss comes out of the insurance companies, nobody is damaged, forgetting the fact that the insurance companies base their premiums upon losses, and that every crooked fire loss is, in the last analysis, paid by the honest insurer.—Fire Marshal Keller, of Minnesota.

Owners will Pay for Neglect.

The Fire Prevention Bureau of New York City is endeavoring to secure the enactment of a statute imposing upon the owners or occupants of properties in which fires originate, after failure to remove hazards of which they have been notified, the expense of fighting such fires, which expense has heretofore been a charge upon the community as a whole. The principle upon which this action is based is that most fires are due to carelessness on the part of the occupants of properties in which fires start. The object is to produce a considerable decrease in the number of fires by imposing a penalty upon those to whose carelessness fires are due. From penalizing carelessness or failure to comply with fire department instructions regarding removal of hazards, to fixing personal responsibility for damage to neighboring property, as in Europe, is but a step. If the present move in New York results in the enactment of legislation along the desired lines, and a reduction in the fire waste follows, we shall see similar enactments in many quarters. In this country the outcome will be awaited with interest by all those interested in fire prevention.

Need for Night Watchmen.

The annual report of the National Fire Protection Association emphasizes that as much care should be taken in selecting a night watchman as in securing a bookkeeper or engineer. In permitting a man to assume watch and care over property representing great values, the owner should be particular to employ not only a strong and able bodied one, but one who is trustworthy and honest. In addition, he should become familiar with and understand the operation of all means of fire protection and manner of extinguishment. Too often it is found that the night watchman is a man unfit for such service—being old, crippled or infirm—and more worthy as a pensioner, instead of qualified to assume the important duties of a caretaker.

Taxing Insurance.

By their decision to fight the taxation of life insurance in Ontario, the Canadian Life Insurance Officers' Association are making a stand against the penalizing by governments of thrift and foresight. The existing Ontario laws will be appealed against by the companies on constitutional grounds. Whatever may be the result of legal engagement, the moral claim is clear. The principle of taxing life insurance premiums is unjustifiable. If the companies can prove the tax is also unconstitutional, so much the better. Those with sufficient prudence to insure are doubly burdened. They must pay their share of the taxation necessary to provide for the destitute (for whose care no life insurance was arranged), and they must pay a further tax for arranging that their own dependent ones do not become a public charge. The taxation imposed upon Canada's life insurance companies has become a serious matter. The life companies' funds have been heavily taxed because they are easily reached. The question is not one only for the life companies; it is one for every man and woman who carries life insurance. The policyholder is directly affected by this taxation, which is increasing at an alarming rate. Only those who believe that their thrift and foresight in taking out life insurance should be penalized by governments will support the taxation.—Monetary Times.

Conflagrations and Insurance.

Willard Done, publicity manager of the Pacific Board of Fire Underwriters, writes the following concerning the conflagration hazard:

"Were it not for conflagration risks, insurance would be very much cheaper. But the conflagration risk is ever present and must be paid for by the insured. The Chicago fire wiped out many insurance companies. The modern insurance companies are much stronger, but the aggregate of the Boston, Baltimore and San Francisco conflagrations took from the companies which survived far more than their entire capital. And yet, for the most part, losses were paid in full and the insurance companies promptly supplied with new capital. But this would never have been done had not the business been generally profitable. Some insurance companies have paid very large dividends during the past year or two, and, of course, this conflagration loss at Salem, well distributed as it is, will not be felt. In modern insurance the risk—which is essentially speculative—is carried by venturesome investors in all parts of the world, and almost invariably by those who can afford to lose, and take their chances with their eyes wide open. Some not wise persons have talked about "state insurance" so as to get "low rates." But low rates do not pay for conflagration risks, and we can imagine the condition in which the finances of California would have been had the state been compelled to raise by taxation the conflagration losses of the San Francisco fire of 1906."

TARIFF

By J. R. K. BRISTOL

THE following list of Board of Customs Decisions was issued on December 8th, 1914:

Composition foil, being lead foil, coated with tin (per sample), declared to be free of duty under tariff item 343.

"Mineral Black," "Vine Black," dry (being bone black and clay), and screened soot, declared to be dutiable under tariff item 711.

Magnesia pipe covering, per sample, declared to be dutiable under tariff item 711.

Classification of articles under tariff item 696:

Declared, that the following articles are free of duty when imported under the conditions in tariff item 696, viz.:

"Lantern Slides" and "Photographic Films"—as photographic reproductions; also adding machines, not being cash registers;

Further, that magic lanterns, stereopticons, cameragraphs and moving picture machines are **not** exempt from duty as philosophical and scientific apparatus under tariff item 696.

Departmental Rulings.

Advertising Circulars, per sample, entered at 35% ad valorem should be dutiable at 15c. per lb.

Wafer Shells, made of rice flour paste, used to enclose medicinal powders of disagreeable taste, ruled dutiable at 17½% ad valorem under tariff item 711.

Embargo on Hides from the United States.

Under the foot and mouth disease—exemptions—it was ordered by the Deputy Minister of Agriculture, under date November 13, 1914, that, viz.:

"United States hides will only be admitted when accompanied by the certificate of an officer of the Bureau of Animal Industry that they have been thoroughly disinfected under their regulations."

"Men employed in handling and unloading hides will be required to wash and disinfect their hands before leaving the premises."

Widening of above November 30th:

By regulations of the Department of Agriculture, dated November 30th, 1914, the above certificate is not required in respect to hides from cattle slaughtered prior to August 1st, nor for hides from animals slaughtered outside of the States under Federal quarantine. This new regulation, which widens the exemption order quoted above, is as follows:

"(a) Hides from cattle slaughtered prior to August 1st, 1914, which have ever since that date been stored away from contact with other hides or live animals.

"(b) Hides from animals slaughtered outside of the States under Federal quarantine, that is, outside of the area comprised by the following States: Connecticut, Delaware, Illinois, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Montana, New Jersey, New York, Ohio, Pennsylvania and Rhode Island."

Importations of hides coming under either of the foregoing descriptions may be permitted, if accompanied by the affidavit of the shipper as to the facts.

By order of the Department of Agriculture, dated 21st day of December, 1914, there is a further lifting of the embargo on hides from the United States, subject to the following conditions:

"Hides and skins of cattle, sheep and other ruminants, which have received ante-mortem and post-mortem Federal inspection of the Bureau of Animal Industry of the United States, may be admitted into Canada in car lots consigned to tanners or tanning companies, when accompanied by a certificate signed by an officer of the Bureau of Animal Industry that the said hides or skins are from animals submitted to inspection as aforesaid."

Exports from Canada of Manganese, Ferro Manganese, Rubber and Graphite Prohibited.

"By orders of the Governor-General in Council, the exportation from Canada of Manganese and Ferro-Manganese, to all destinations, is prohibited, under the provisions of Sections 291 and 242 of this Customs Act;

"And the exportation from Canada of Graphite and Rubber is also prohibited, under the provisions of Sections 291 and 242 of the Customs Act, except to the United Kingdom and to British possessions."

Samples of Wool from United States.

The Department of Agriculture has issued the following instruction in regard to above:

"Re Foot and Mouth Disease in United States—

"This Department does not consider samples of wool arriving from the United States, either by mail or express, as coming within the terms of the general prohibitory order of the 9th November last and amendments thereto, and I have to request that you instruct your officers in this sense."

Personal Gifts from Canadian Overseas Force to Relatives or Friends, Free During War.

"During the war, personal gifts from members of the Canadian Overseas Expeditionary Force to relatives or friends in Canada may be entered free under tariff item 690."

Australian Tariff Changes.

Early in December the Government of Australia introduced general tariff changes in the Australian Federal Legislature. These tariff changes as introduced increase the duty on agricultural implements and machines, chassis, paper, lumber, fish, furniture and metal goods. They also continue the preference to the United Kingdom. There is no preference, however, to Canada, as yet.

Statistical Comparison of Canada's Foreign Trade.

During the month of November, 1914, there were imported dutiable goods to the value of $18,697,737, compared with $32,338,858 in the same month of 1913, and $38,471,620 in the same month 1912. The value of importations of free goods for

November, 1914, is $12,854,453, compared with $17,863,298 in the same month of 1913, and $20,856,934 in November 1912.

The total importations for November, 1914, were $79,880,917, compared with $52,016,560 in November, 1913, and $59,730,343 in November, 1912—the difference between these totals and the combined values of free and dutiable importations represents importations of coin and bullion.

In exports, values compare as follows:

Month of November.

	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
	1912.		1913.		1914.	
The mine	$4,803,132	$13,587	$5,364,563	$57,534	$3,655,475	$28,858
The fisheries	2,036,342	12,238	2,225,333	4,728	2,056,055	14,794
The forest	3,981,040	969	4,107,090	31,643	3,439,970	122,487
Animals and their produce	4,939,152	106,141	7,795,511	114,659	8,370,602	814,967
Agriculture	24,175,570	1,068,217	33,417,055	519,434	18,846,286	1,708,361
Manufactures	3,830,609	739,908	4,841,922	466,151	6,376,500	599,798
Miscellaneous	15,214	69,039	10,854	122,917	27,221	80,887
Total merchandise	$43,781,059	$2,010,099	$57,762,328	$1,317,066	$42,872,109	$3,370,152
Coin and bullion		550,581		363,429		331,957

Eight Months ending November.

	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
	1912.		1913.		1914.	
The mine	$38,197,371	$97,374	$39,440,172	$168,157	$35,169,285	$186,034
The fisheries	10,499,324	84,245	13,556,463	51,702	11,980,770	92,777
The forest	33,574,767	376,400	33,194,796	553,209	32,357,299	476,590
Animals and their produce	33,949,333	717,998	38,824,803	991,288	50,135,045	1,966,388
Agriculture	96,349,345	8,536,996	142,338,227	8,187,480	94,519,512	3,283,470
Manufactures	27,359,484	5,974,272	35,879,368	7,893,231	45,425,224	5,090,279
Miscellaneous	62,908	1,697,410	78,153	2,469,010	242,295	2,890,875
Total merchandise	$239,993,532	17,484,695	$303,311,982	$20,314,077	$269,629,430	$44,986,413
Coin and bullion		6,951,888		7,829,191	430	4,099,439

SUGGESTIONS FOR CANADIAN EXPORTERS

Who May be Engaged in or Seeking South American Trade

1. Unless otherwise requested, quotations should be C. I. F. port of entry, and any other information that could be serviceable might be added. This is important, owing to the length of time required to exchange correspondence.

2. The postage on letters directed to South American countries is 5 cents.

3. A map of the world showing the trade routes to South America should be carefully studied, and after that the map of the Continent.

4. All letters for foreign countries should be signed.

5. Avoid brusque letters. Some types of communications are greatly disliked by Latin-American business men. Courtesy is highly important in all dealings.

6. It is impossible to take too much care with regard to packing and marking. New cases should be used, for which, if necessary, a charge can be made. Experiments might be conducted in various methods of packing, and the results subjected to severe tests.

7. Cable address and codes used should be printed on all letter paper.

8. B/L, Invoice, and Consular Certificate in connection with a shipment must be mailed as soon as possible, or accompany goods, in order to obviate delays in clearing same at this end. Documents for South American countries must be prepared with the most rigid care, as regulations governing imports are extremely exacting.

9. Questions must not be looked at entirely from the viewpoint of Canadians; an endeavor should be made to see the Latin-American's side also.

10. Contracts, however small, ought to be fulfilled to the very letter and a client's interests conserved as the exporter's own.

11. Read the "Weekly Report," Trade and Commerce Department, Ottawa, systematically, and file copies for future reference.

12. Lastly, do not neglect the smallest detail that will make for success, from the receipt of the order until it is finally in the hands of the customer.—Trade and Commerce Report.

SYDNEY BLAST FURNACE OPENS.

The Dominion Iron and Steel Co., Sydney, N.S., have restarted No. 1 blast furnace, which had been banked down since August. This makes the second furnace in active operation.

DEATH OF DAVID MORRICE.

In the death of Mr. David Morrice, of Montreal, Canada loses one of the fathers of her cotton industry. As a manufacturer he was naturally a Protectionist, and Sir John A. Macdonald had no more enthusiastic follower in the National Policy campaign of 1878. When the late Sir Leonard Tilley was framing the moderately protectionist tariff, after receiving the people's mandate on September 18th, 1878, he sent for David Morrice more than once, and abided largely by the counsel given him by the Montreal merchant and manufacturer. Mr. Morrice was also interested in many manufacturing concerns throughout the country, was president of the Canadian Cottons, Ltd., president of Penman's, Ltd., and of the Montreal Freehold Co.

LEGISLATION

By F. W. WEGENAST

WHEN the Canadian Manufacturers Association complied with the request of Sir William Meredith and submitted a draft classification of industries for insurance purposes, they never imagined that the classification schedule so presented would be taken as the final word on the subject of classification. In fact, it was definitely understood at the time of presentation that the draft classification was to serve as a basis for discussion only, and would be amended after a fuller study of the subject which the Association undertook to make. The necessary information was collected, but to the surprise of the Association the Act was passed with the rough draft, and no further opportunity was given for discussion or amendment. The government, however, promised that the matter of re-classification would be duly undertaken by the administrating Board.

As soon as the Board was appointed the matter was taken up in a variety of its phases, but great reluctance has been shown in making corrections and alterations. It has required an uphill struggle to obtain a readjustment of the most obvious errors, while other errors equally apparent and manifestly unfair to employers have been left unchanged, although their correction would in no way affect any legitimate interest, and would, if anything, simplify the work of the Board. Possibly the most glaring example of incorrect classification is that of the industries comprised in Classes 8 and 10 of the Act, which read as follows:

Class 8.—Iron, steel or metal foundries; rolling mills; manufacture of castings, forgings, heavy engines, locomotives, machinery, safes, anchors, cables, rails, shafting, wires, tubing, pipes, sheet metal, boilers, furnaces, stoves, structural steel, iron or metal.

Class 10.—Manufacture of small castings or forgings, metal wares, instruments, utensils and articles, hardware, nails, wire goods, screens, bolts, metal beds, sanitary, water, gas or electric fixtures, light machines, typewriters, cash registers, adding machines, carriage mountings, bicycles, metal toys, tools, cutlery, instruments, sheet metal products, buttons of metal, ivory, pearl or horn.

At a meeting of representatives of all the industries in these two classes the existing classification was unanimously condemned, and the following revision suggested in its stead:

It is suggested that smelters and blast furnaces be placed, or left. in Class 5, along with mining, reduction of ores, etc.

It is suggested that the industries now comprised within Classes 8 and 10 be distributed into four groups, as follows:

Group 1.—Rolling mills; manufacture of iron and steel (ingots, blooms, billets, slabs, bars, angles, sheets, rails and tubing); heavy forging.

Group 2.—Fabricating structural steel; manufacture of boilers, engines, locomotives, cranes; shipbuilding.

Group 3.—Iron and steel foundries; manufacture of stoves, furnaces, radiators, sanitary ware and the like.

Group 4.—Machine shops and foundries other than iron and steel; manufacture of machinery not otherwise specified; safes; cold drawn or cold rolled shafting, tubing, sheet metal or wire; light forgings; metal bedsteads; cables, nails, nuts and bolts, wire goods; sheet metal products, stampings; hardware, tools, metal instruments and wares; lighting fixtures, carriage mountings; bicycles, typewriters, cash registers, adding machines, scales, firearms; dry batteries, cameras, rubber stamps; buttons and articles of ivory and pearl.

The Committee appointed by the meeting waited on the Compensation Board, and after a thorough discussion of all phases of the subject, the reasonableness of the demands of the steel and iron manufacturers appeared to be frankly and fully recognized. Subsequently the following reply was received by the Board:

"The Board has given very careful consideration to the representations which were made by the various members of this Committee. There are many reasons why we would like very much to meet the views of the metal manufacturers and make a re-classification along the lines mentioned in our conference, as these seem to meet with fairly general acceptance. With this in view we have gone carefully through the returns which have been sent in for the purpose of seeing whether or not such a re-classification could be readily made at the present time. We find that in a large percentage of the returns as we have them before us the whole enterprise can be easily placed in one class—that is, either 8 or 10, and in this connection by way of comparison we have endeavored to form a correct idea as to how this would work out in the finer segregation of the classes proposed by your Committee. It is at once apparent that in a large percentage of the cases it would result in putting a firm in two or three classes instead of in one class as it stands now, and as we view it, it is desirable to avoid this wherever it is possible to do so.

"The chief reason which seemed to weigh with your Committee in desiring the segregation proposed, had to do with the provision for Accident Prevention Committees under Section 101 of the Act. We recognize the importance of this. Indeed the Board feels that it is its first duty to aid in every reasonable way any effort or scheme looking toward accident prevention, which any group of employers may desire to inaugurate.

"We see no reason, however, why this idea cannot be worked out as matters now stand. It would be, as I am sure you will recognize, a physical impossibility for any one man to carry out with any degree of success the work of inspecting, and inauguration of accident prevention measures in, all the industries or establishments which could now be represented in Class 8, even if it were possible to find a man sufficiently familiar with all of these varied industries to qualify him for such inspection. Suppose we say, therefore, to those in the trade who would comprise your first group—we will constitute you a sub-class for the purpose of your accident prevention plans and you can have an inspector of your own choosing, and the same to the other groups segregated as fine as may be appropriate. We see nothing in the Act to prevent this, and in working it out this way the desired end is attained without disturbing the solidarity of the class.

"We hope this arrangement will meet the views of the manufacturers comprised in these groups. We regard it as desirable from our present point of view, that the classes remain substantially as they are for the next year, and in the meantime we will all have acquired light on the subject, which will no doubt teach us many things in the matter of classification.

"So far as shipbuilding is concerned, we had thought at first of taking this industry from Class 42 and placing it in Class 8, because as the industry stood alone in this class in Schedule 1, it would form a very weak group. On reconsideration, however, we decided that it would be better to transfer all shipbuilding and navigation which formerly stood in Schedule 2 to Schedule 1, and unite Classes 42, 43 and 44, thus making a fairly strong group.

"So far as the Polson Iron Works is concerned, probably the greater part of this Company's business would be properly audited in Class 8 in any event, but we would rather ask them to divide their pay-roll, if necessary, than to transfer the whole shipbuilding industry to Class 8.

"The decision of the Board, therefore, is to make no change in the classification at present, but there is no reason why an application along similar lines should not be made again toward the end of next year if you are so instructed."

The reply of the Board was laid before the Committee, and the following letter prepared and submitted by way of reply:—

"Referring to your letter of the 8th December, in answer to the representations of the Committee representing the metal trades, I may say that the Committee met this morning to consider the reply of the Board to their application, and this letter has been dictated under the instructions of the Committee.

"There is keen, and natural, disappointment that their request, which they considered a fair and reasonable one, should not have been granted. It may not be out of place to state in all frankness that the Committee's ideas are based on the view that the burden which the Act places upon employers should, other things being equal, be adjusted in the manner best adapted to the convenience of the employers. The employers of the steel and iron group had taken up the matter with a view to assisting the Board in working out their part of the general scheme in the best possible manner for themselves and the Board, and while they would be prepared to bow to the convenience of the Board, under existing circumstances they fail to see, notwithstanding your very courteous and painstaking reply, that the proposals which were submitted would not even now, with the revision of the returns in which the Committee would be glad to assist the Board, simplify the work of the Board, with the addition of best serving the interest of employers and providing the greatest amount of incentive to accident prevention.

"However, the decision of the Board having been given, the employers of the steel group will do their best to adapt themselves to it, having in view a renewal of their application in the course of a year. The Committee is taking steps to comply with the suggestion of the Board in organizing accident prevention associations in accordance with the grouping which they had proposed. They assume that information will be available in due time which will enable them to allocate the injuries and their cost to the various groups; so that the Rolling Mill Association, for instance, will be able to separate its claims from those occurring in such plants as the Waterous Engine Works, or Goldie & McCulloch's, or the Dominion Bridge Works, which under the present classification are in the same group.

"The Committee beg to suggest that this information should be available from month to month, or perhaps from quarter to quarter, for the guidance of the directors of the different associations in their work. It is probably unnecessary to point out that it is by a careful and expert study of these returns that the best work in accident prevention will be accomplished. The Committee would be glad to have your reply to this phase as a basis for their plans of organization and activity."

THE SEVEN WONDERS OF THE WORLD.

By Elbert Hubbard.

The Man who will work without being watched.

A Sales Manager who doesn't think he pays the old man's salary.

A Salesman who thinks that perhaps the quality of the material may have something to do with his making those large contracts.

A Stenographer who knows punctuation, and will look in the dictionary when she is uncertain about the spelling.

A Purchasing Agent who doesn't think he does you a favor when he asks you to quote.

A New Superintendent who will wait a week before installing a much better system than his predecessor.

A Boss who acts as if he wasn't.

NEW MANUFACTURING COMPANIES.

The following companies have been incorporated in Canada for manufacturing purposes:

Montreal, Que., The Sandwich Bay Pulp & Lumber Co., Ltd.	$2,000,000
Walkerville, Ont., Walkerville Roofing Mfg. Co., Ltd.	60,000
Montreal, Que., International Lime Co., Ltd.	200,000
Toronto, Ont., Canadian Cartridge Co., Ltd.	100,000
Toronto, The Paste Co. of Can., Ltd.	100,000

Du Pont Safety Powder Co. of Can., Limited, Montreal—name changed to "Palmer-Perchlorate Powder Co. of Canada, Limited."

ARTICLES WANTED AS A RESULT OF WAR.

The Wallaceburg Brass & Iron Manufacturing Company, Wallaceburg, Ontario, would like to know where they can procure a supply of porcelain handles suitable for gas cocks, basin and bath cocks and other plumbers' brass goods. Before the war they were supplied from Germany through a New York agency. They will supply samples showing design, material and workmanship required.

The Toledo Scale Company, Windsor, Ontario, need rectangular convex lenses and scale agates for bearings.

The Decalcomania Company of Canada, Limited, Toronto, Ontario, are in the market to purchase aluminum leaf and imitation gold leaf.

ARTICLES FOR SALE AS RESULT OF WAR.

The Canadian Carbon Company, Limited, Toronto, Ontario, have for sale, as a result of the war, salamoniac, chloride of zinc, arc light carbons and moving picture carbons of all descriptions.

The Calgary Brewing & Malting Company, Calgary, Alta., state that the importation of hops from Germany and Austria has been cut off as a result of the war, but that hops grown in British Columbia may be substituted.

The Standard Underground Cable Company of Canada, Limited, Hamilton, Ontario, state that all buyers who have heretofore purchased in Europe bare and insulated wire and cables, can be supplied from their Hamilton factory and their stock carried in Montreal and Winnipeg.

SOUTH AFRICAN TRADE.

The Elder Dempster Co., Limited, Montreal, advise that South Africa offers an excellent market for exports from Canada, and in order to encourage this trade they are offering to carry samples free of charge and will make special rates on shipments so that Canadian manufacturers may be able to compete with other countries.

HUSTLING FOR BUSINESS IN WAR TIME—THE RIGHT WAY TO GO ABOUT IT

An Answer to the Questions that Thousands of Canadians Have Been Asking. Views of Sir George E. Foster, Minister of Trade and Commerce.

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SIR GEORGE FOSTER, Minister of Trade and Commerce, was asked the questions: "In view of the greatly restricted facilities for securing loans from banks or capital from private investors, how would you suggest that the Canadian manufacturer and farmer should follow the advice to 'go after the new opportunities' created by the war? Lacking funds for development, how can the manufacturer or farmer extend operations to embrace new fields? What would you say was the safest and surest channel for Canadian trade expansion and how the Canadian 'business-man' should set about it?" Sir George's answer follows:—

How Manufacturer will Connect.

"You have put a straight and somewhat difficult question to me when you ask how the Canadian manufacturer is to connect with the new opportunities for trade which I have been setting forth so strongly.

"Undoubtedly there were and still are difficulties in the way. These are mainly dislocation of transport and higher insurance and freight rates thereon, confusion in the mechanism of exchange amounting in some cases to virtual prohibition, unfavorable financial conditions in some overseas countries which have caused cancellation of orders, and insecurity of credits coupled with the necessity for long terms of payment.

"These are certainly hindrances which cannot be ignored, but they are world-wide, and, what is better, temporary. Already, in the three months since war began, they have grown appreciably less, and with the dominance of the British Navy in all seas, will, in due time, disappear so far as they arise from insecurity of transport. Between North America and Great Britain unfavorable financial exchanges have been largely improved, but in South American countries they will continue longer and will prevent the full measure of trade carried on under normal conditions, but these countries are rich in natural resources, and, not being within the area of belligerency, will gradually adjust themselves to the changed circumstances, and being large consumers of manufactured goods and larger producers of primary products, the adjustment is bound to come.

Situation in Neutral Countries.

"In neutral countries two factors are working. The capacity for purchase of what we produce in satisfaction of their wants is not greatly diminished, and on the other hand the supply of much of these required products is cut off by dislocation and virtual prohibition from the war zone. That is, competition is far less against us and the capacity for consumption is not much impaired. Norway, Sweden, Denmark, Spain, Italy and the United States are examples of this phase of trade. In friendly belligerent countries various currents flow. The destruction of war calls for enormous quantities of food, clothing and munitions, for the supply of which Canada occupies an advantageous position, actual and sentimental. In these same countries the diversion from peaceful pursuits and the cessation of imports from the enemy countries in enormous quantities, force large imports from abroad, and here again Canada stands to gain largely. It will be the fault of Canadian producers and business men if they do not follow these favorable leads to their great advantage. The producers of primary products will reap the larger part of this harvest, but the manufacturers have also a great opportunity from which they should spare no pains to profit. Great Britain, Russia and France are financially and commercially strong, and while carrying on war must and will purchase enormous supplies of all kinds of world products. In South Africa, Australia and New Zealand and the West Indies, there is less dislocation and little, if any, diminution of purchasing power. In all these, German competition is for the time eliminated, and a glance at the tables of their imports shows what a large vacuum is created by this elimination. Canada has only to increase her canvassing activity and she will expand her sales to all these kindred countries.

Soil is Ready.

"Canada does not need capital to cut down standing forests in order to prepare soils fruitful in primary products. The soils are there ready for the plow, and labor is everywhere ready for employment; without any further extraordinary calls on capital, twenty-five or more per cent. can next year be added to the primary products of the Dominion, for which call at very paying prices will undoubtedly he had. If these are raised there is no fear that banking facilities will not be forthcoming to move them to market. Similarly our forest, fishery and mining areas are equipped, and as the demand persists the products will find their way to the markets. There is at present more or less dislocation in these markets, but that is temporary and already shows signs of amelioration.

"When we come to our industries there are also favoring indications. In the first place Canada is extraordinarily well equipped with the machinery of industrial production already adapted or easily adaptable to present condition. Capital is not needed for buildings, and not to any great extent for equipment. These are in place and the labor is at hand, and the problem is rather to carry on and not in any large degree to create anew. If markets can be found, operations can proceed with ordinary banking facilities, and these I believe are provided for and will be had. Some industries will temporarily be slowed down, some few for a time stopped, but on the other hand many will be stimulated and most will continue, with perhaps lessened hands or shortened time, and expand as new sources of outlet are found abroad and increased buying takes place at home.

Home Market is the Prize.

"Nor should we lose faith in the purchasing ability of the home market. In this, Canada is unique as to her position today. Her export of primary products of the farm, mine, fisheries and forests was last year worth nearly $400,000,000. Is there any reason for fearing that the values this year will be less? Very little, if any. Loss in some will be more than

made up by the increased prices in most. The field crops last year were worth $552,000,000. They will be worth more this year. The home sales and exports this year will give a return which will be an assured basis for large purchasing power on the part of our primary producers. For next year with increased product and increased prices this basis will be still wider. These are farmers' years and their prosperity determines trade.

"The foregoing are general considerations, but their contemplation tends to inspire courage and confidence. There is surely something to go after and there is ability and equipment to ensure success. What then ?

Targets to be Aimed at.

"Choose the lines of least resistance and work first and mainly along these.

"And what are they ?

"To my mind the nearest and best and easiest attack to be made is upon the Home Market. It is close to us, right at our doors. It is vast in itself, and, as I have shown above, well based on a large production of primary products commanding good prices. Our manufacturers already have a large part of it, but they should have more. The statement that many hundred millions worth of goods come into Canada each year in lines that can be fairly produced in the country should arrest attention at any time, but more especially at this time when factories are partly idle and men unemployed. If a custom of $300,000,000 suddenly opened up to us in a foreign country, what intense interest it would excite and what an impetus would be given to our industries, and how many more men would be at work therein. But these results would be equally as well attained if only our consumers would transfer half their custom from foreign goods to home-made goods. The motto, 'Buy made-in-Canada goods,' practically adopted for one year, would keep the wheels going wonderfully, and keep the homes of labor going just as wonderfully. And it requires no extra financing from bankers or others to carry on along these lines. Here, then, is a most profitable, natural and easy way for our people to connect with the new opportunities offered at home.

Overseas Markets.

"Now, as to outside or overseas markets. Take Africa, Australia and New Zealand, in which our industrial products have already made a place for themselves. A new opportunity with a large vacuum created and a very intense competition removed is opened. It does not require larger capital or greatly increased banking facilities to enable our people to extend the connections already made and so expand their exports. Take then the United Kingdom, France and Russia. Think of the vast destruction of industries in Belgium and a large portion of France, and think to what an extent these formerly supplied iron and steel work of all kinds. Then think what Germany formerly supplied and now does not. The three countries named are now calling for immense quantities of supplies turned out by iron and steel works, and there is an opportunity for our establishments of like kind to utilize. Add to these still more immense quantities of other supplies needed for army consumption and of which Canada can have her full share by going for it. I must dwell on these words, 'going for it.' Some custom comes to those who simply sit and wait for it, some to those who besiege the Canadian Government, and get from them and through them work orders, but the real and permanent business can only be got by 'going for it' to the home sources of demand.

Direct Examination Necessary.

"Direct and personal examination of the situation where it develops, direct and personal representations of what manufacturers can make to suit requirements and the price at which they can supply it, face to face with the one who wants this, is infinitely more fruitful of results than tons of correspondence. And this direct representation does not need much added capital—much banker's aid. These occur to me as practical lines involving small expenditure and making connections that will bring in a large current of profitable and increasing business for our factories."

THE ROYAL BANK STATEMENT.

It is perhaps owing to the peculiar conditions that prevail in the country as a result of the European war that the banks have found it advisable to keep themselves in a position that would enable them to help in any contingency that might arise, and in this way secure the real interests of the country at large. To what extent the Royal Bank has followed such a policy can be best appreciated from the general statement, which shows that at the close of its fiscal year, November 30th, 1914, the amount of cash on hand reached the high level of $27,683,855, equivalent to such a large percentage as 17.93 per cent. of liabilities to the public. At the end of the previous year the cash on hand was equivalent to 13.83 per cent., so that for the year an increase of over $6,000,000 is shown. The liquid assets, in which the cash on hand is also included, amount to $71,244,677, equivalent to as much as 46.16 per cent. of liabilities to the public. The principal accounts included under this heading are: Railway and other bonds, debentures and stocks, not exceeding market value, $13,557,741; Canadian municipal securities and public securities other than Canadian, $2,185,062; cheques on other banks, $5,752,485; balances due by banks and banking correspondents elsewhere than in Canada, $3,144,502.

BANK OF COMMERCE STATEMENT.

The Annual Statement of the Canadian Bank of Commerce shows net profits for the year ending November 30th to have been $2,668,233, which have been appropriated as follows: Dividends at ten per cent., $1,500,000; bonuses, $300,000; pension fund, $80,000; Canadian Patriotic Fund, $50,000; Canadian Red Cross, $5,000. The balance carried forward is $1,117,763, which includes a balance of $384,529, carried from the Profit and Loss account of last year. The strength of the bank is shown by its assets, which amount to $245,364,398, and these assets have been appraised according to war conditions. Current coin, Dominion notes, amount to $30,337,215, and notes, cheques and balances due from other banks represent $13,017,162. Added to these amounts are the securities and call and short loans, which bring the assets up to $92,983,653. The largest item in the statement of assets is "other current loans and discounts in Canada (less rebate of interest)" which amounts to $132,168,482. This shows that the bank is endeavoring to assist Canadian business at the present time so far as consistent with sound banking principles.

DOMINION GOVERNMENT WILL CONTINUE WORKS.

Work will continue this winter on the big public works of the Government. The harbor works at St. John, Halifax, Quebec and Montreal, the Port Nelson terminals, the Welland Canal work and the coastal terminals at Vancouver and Victoria are to go ahead. A large contract now being awarded provides for a breakwater at Goderich.

MARITIME FORWARD LEAGUE FORMED

Great Conference in Amherst Started a Movement Which will be of the Utmost Importance to the Maritime Provinces

THE organization of the Maritime Forward League at a conference of the leading business men of Nova Scotia, New Brunswick and Prince Edward Island, held at Amherst in December, will be one of the landmarks in the industrial history of the Maritime Provinces. The purpose of the League is defined in the following extracts from the address of Mr. Joseph H. Douglas, Chairman:

"The idea largely originated with the energetic president and the executive of the Maritime Branch of the Canadian Manufacturers Association, and the success, if any, will be altogether due to their energy and foresight. It can be stated as a primary object of the movement: To call together at one meeting, men drawn from all parts of the provinces and representing the various phases of maritime life and activity, that an opportunity might be offered for a better understanding, and a closer association between the men of these provinces. It was not the intention of the movement to assume the functions of the Maritime Board of Trade, or any other organization, but rather to broaden the scope and to embrace all the different interests in the one conference, in a manner that has not heretofore been attempted. It is the purpose of this meeting to inspire in our maritime people a greater faith and confidence in our resources and possibilities. Subjects for discussion have been chosen with that purpose in view."

The following resolutions were adopted:

No. 1.

Resolved, that this convention is of opinion that a Maritime Forward League should be organized, having for its objects the promotion of the industrial, commercial, mining, agricultural and general interests of the Maritime Provinces of Canada; the dissemination of literature bearing upon the natural resources and opportunities of the Maritime Provinces; the awakening of these provinces to the trade and other possibilities that exist for them; the breathing of a new life of good-will, mutual help and unity among the whole population of the maritime section of the Dominion, and the fostering of a healthy maritime spirit.

No. 2.

Resolved, that the officers of the League shall consist of a president, a vice-president from each of the provinces of Nova Scotia, New Brunswick and Prince Edward Island, a secretary and a treasurer; that these officers, with ten others chosen by this meeting, form the executive of the League; and that the executive be given authority to complete the organization and to make such provisions as they may deem nccessary for its maintenance.

No. 3.

Resolved, that all manufactures of the Maritime Provinces, wherever possible, shall bear in a conspicuous place this distinctive mark:

"MADE-IN-CANADA."

No. 4.

Resolved, that the executive be authorized to arrange a series of "Maritime Get-Together tours" during the coming season, to include trips to St. John, Halifax, Sydney, Charlottetown, and such other points in the Maritime Provinces as might be decided upon.

No. 5.

Resolved, that it is the opinion of this convention that in purchasing supplies for the government railways in the Maritime Provinces preference should be given to maritime business houses, provided quality and price are equal with outside houses.

No. 6.

Resolved, that with a view to a better appreciation of maritime conditions and aspirations a deeper realization of the needs of the three Maritime Provinces of Canada—Nova Scotia, New Brunswick and Prince Edward Island—and with the object of securing more harmony of effort and a greater uniformity of legislative action, it is deemed desirable that an inter-provincial conference of the premiers and members of the government of the respective provinces should be held once a year alternately at one or other of the provincial capitals, or at such other points in the provinces as may be mutually agreed upon;

And further resolved, that a copy of the above resolution be forwarded to the premiers of the Provinces of Nova Scotia, New Brunswick and Prince Edward Island.

No. 7.

Resolved, that the executive be requested to inquire into the advisability of publishing and circulating a Maritime Province Hand-Book, to contain detailed information with respect to the Maritime Provinces, their natural resources, industries, business enterprises, educational institutions, trade opportunities, scenic beauties, methods of travel, etc., and that the governments of the three Maritime Provinces be asked to meet any necessary expenditure incurred in connection therewith.

No. 8.

Resolved, that while approving in the fullest degree of the support that has been given to the military arm of the Empire by the people of Canada, this convention recognizes the equally great and pressing responsibility that rests upon the manufacturers, business men and agriculturists of this and every part of Canada to properly sustain the commercial arm of Great Britain, and to employ every means at their command to expand the home and foreign trade of the Empire, to capture foreign markets that have hitherto been supplied by hostile European powers, to persuade the people of the Maritime Provinces to patronize British-made and Canadian-made articles, to develop for our own benefit and for the benefit of the Empire our great natural resources of field, mine, forest and sea.

Among the visitors and delegates from the Maritime Provinces were: Right Hon. Sir Robert L. Borden, Major-General the Hon. Sam Hughes, Hon. George H. Murray, Halifax; Premier Mathieson, Charlottetown; Hon. C. W. Robinson, Moncton; J. H. Sherrard, Montreal, Vice-President C. M. A.; E. N. Rhodes, M.P., Amherst; A. K. McLean, M.P., Halifax; F. B. McCurdy, M.P., Halifax; P. G. Mahoney, M.P.P., Melrose; J. L. Ralston M.P.P., Halifax; H. J. Logan, K.C., Rev. Dean Llwyd, Halifax; Dr. O. B. Price, Moncton; Thomas Cantley,

(*Continued on page* 625.)

Accept Hydro's Sincere Wishes for Your Welfare and Happiness during 1915

P.S. Hydro Engineers are willing to declare a truce in their war on wasteful power plants for New Year's Day —but that one day only.

Otherwise—we are at the other end of your telephone line.

The Toronto Hydro-Electric System

226 YONGE ST. PHONE ADEL. 2120

FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of December, 1914.

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

C.R.C.	R.R. No.	Effective.	Description.
Grand Trunk Railway.			
Sup. 19 E 2783	Sup. 19 C.I. 145	Nov. 28-14	Pig iron c.l. Point Edward to London, Ont. Reduction.
Sup. 1 E 2923	Sup. 1 A 18	Dec. 28 (A) Nov. 28 (R)	Arbitraries between Maritime junction points. Advance. Reduction.
Canadian Pacific Railway.			
Sup. 19 E 2189	Sup. 19 E 1785	Dec. 1-14	Commodities C.P. stations to St. John, W. St. John and Halifax for export. Reduction.
Sup. 15 E 1714	Sup. 15 E 1301	Dec. 5-14	Canned goods c.l. between C.P. stations. Reduction.
Sup. 16 E 2570	Sup. 16 E 2178	Jan. 2-15	Commodities C.P. stations to points in U.S.
E 2898 cancels E 2887	E 2829 cancels E 2518	Nov. 23-14	Steel bars c.l. Hamilton and Sydney to Victoria and Vancouver, B.C.
Sup. 14 E 2560	Sup. 14 E 2167	Nov. 25-14	Import freight St. John and W. St. John to
Sup. 12 W 1953	Sup. 12 W 3215	Jan. 14-14	Class and commodity rates between Port Arthur, Fort William, Westfort and stations west.
Sup. 13 W 1842	Sup. 13 W 2952	Dec. 7-14	Ores and concentrates stations and Lake points of call in B.C. to smelters.
Sup. 14 W 1973	Sup. 14 W 3240	Dec. 8-14	Class and commodity rates between Vancouver, Westminster, Victoria and points east.
Sup. 13 W 1953	Sup. 13 W 3215	Dec. 7-14	Class and commodity rates Port Arthur, Fort William, Westfort and stations west.
Sup. 40 W 1806	Sup. 40 W 2866	Dec. 16-14	Lumber, shingles, etc., interior and coast mills to points on C.P., C.N. and G.T.P. Rys.
Sup. 1 E 2883	Sup. 1 E 2513	Jan. 4-14	Class and commodity rates to points in U.S. Reduction.
Sup. 55 E 2713	Sup. 55 E 2330	Dec. 7-14	Commodities between C.P. stations and to points on connecting lines. Reduction.
Sup. 14 E 2643	Sup. 14 E 2259	Dec. 8-14	Pig iron c.l. between C.P. stations. Reduction.
Sup. 20 E 2189	Sup. 20 E 1785	Dec. 9-14	Commodities to St. John W., St. John and Halifax for export. Reduction.
Sup. 7 E 2491	Sup. 7 E 2091	Jan. 6-14	Commodities C.P. stations to points in U.S. Reduction.
E 2863 cancels E 2811	E 2513 cancels E 2436	Nov. 30-14	Class and commodity rates Detroit to stations in Canada. Advance. Reduction.
Sup. 21 E 2332	Sup. 21 E 1932	Oct. 31-14	Export traffic Ontario points to Montreal. Reduction.
Sup. 16 E 2189	Sup. 16 E 1785	Nov. 23-14	Commodities C.P.stations to St. John, W. St. John and Halifax for export. Reduction.
Sup. 22 E 2332	Sup. 22 E 1932	Dec. 7-14	Class and commodity rates C.P. stations to Montreal and Quebec for export. Reduction. Advance.
Sup. 31 E 2529	Sup. 31 E 2133	Dec. 11-14	Commodities C.P. stations to points in U.S. Reduction. Advance.
E 2893 cancels E 1593	E 2524 cancels E 1180	Dec. 14-14	Paper C.L., C.P., Hull Elec. and Q.C. stations to points in U.S. Reduction. Advance.
Sup. 53 E 2713	Sup. 53 E 2330	Dec. 18 (A) Nov. 16 (R)	Commodities between C.P. stations. Reduction. Advance.
Sup. 13 E 2646	Sup. 13 E 2262	Nov. 14-14	Switching and interswitching. Advance. Reduction.
Sup. 32 W 1615	Sup. 32 W 2443	Dec. 1-14	Lumber and shingles, coast and interior mills to stations in Eastern Canada.
Sup. 9 W 1973	Sup. 9 W 3240	Nov. 1-14	Class and commodity rates between Vancouver, Victoria, Westminster and stations east.
Sup. 15 W 1856	Sup. 15 W 2972	Various dates	Import tariff Oriental ports to points in Eastern Canada.
Sup. 12 W 1969	Sup. 12 W 3235	Various dates	Commodities between C.P. western line stations.
Sup. 5 W 1920	Sup. 5 W 3115	Nov. 15-14	Commodities C.P. and C.N. stations to points in Eastern Canada.
Sup. 9 W 1827	Sup. 9 W 2907	Dec. 12-14	Commodities, C.P., C.N. and G.T.P. stations to points in U.S.
Sup. 8 W 1885	Sup. 8 W 3045	Variousdates	Commodities for export, C.P. and C.N. stations to Quebec, St. John and W. St. John
Sup. 13 W 1969	Sup. 13 W 3235	Various dates	Commodities between C.P. Western line stations.
W 1991 cancels W 1855 1903	W 3293 cancels W 2971 3081	Dec. 1-14	Import and proportional tariff from Oriental ports of call to stations in Western Canada.
Sup. 20 W 1919	Sup. 20 W 3111	Nov. 23-14	Switching and interswitching at C.P. and E. & N. stations.
Sup. 20 W 1919	Sup. 20 W 3111	Nov. 23-14	Switching and interswitching at C.P. and E. & N. stations.
W 1992 cancels W 1983	W 3296 cancels W 3260	Dec. 20-14	Rules and regulations at C.P. and E. & N. stations.
Sup. 14 W 1969	Sup. 14 W 3235	Various dates	Commodities between C.P. western line stations.
Sup. 12 W 1842	Sup. 12 W 2952	Nov. 24-14	Ores and concentrates, stations and ports of call in B.C. to smelter.
Sup. 10 11 12 W 1973	Sup. 10 11 12 W 3240	Various dates	Class and commodity rates, Vancouver, Westminster and Victoria to stations east.
Sup. 16 W 1969	Sup. 16 W 3235	Various dates	Commodities between C.P. stations.
Sup. 16 W 1856	Sup. 16 W 2972	Various dates	Import freight Oriental ports to points in Eastern Canada.
Sup. 1 W 1970	Sup. 1 W 3229	Dec. 1-14	Commodities C.P. stations to points in the Orient.

MARITIME FORWARD LEAGUE FORMED.

(*Continued from page* 622.)

General Manager of the Nova Scotia Steel Company; R. W. McKay, M.P.P., New Glasgow; Rufus S. Carter, M.P.P., Maccan; A. B. Crosby, Halifax, and Senator Dennis, Halifax.

The following Maritime manufacturers were represented at the conference:

Amherst—

The Amherst Foundry Co.
The Nova Scotia Carriages.
Amherst Red Stone Company.

Sydney—

Messrs. Shaw and Mason, Limited.

New Glasgow—

Canada Tool and Specialty Co.
Nova Scotia Steel and Coal Co.

Yarmouth—

The New-Burrell-Johnson Iron Co.

Halifax—

Messrs. Brandram-Henderson, Ltd.
John Starr, Son and Co.
Royal Print and Litho.

Sackville—.

Charles Fawcett, Limited.
The Enterprise Foundry Co.
The Sackville Freestone Co.

Dorchester—

The Eastern Linen Mills, Ltd.

Hillsboro—

The Albert Manufacturing Co.
The Record Foundry and Machine Co.
John Abrams' Sons, Ltd.

St. Stephen—

The Mann Axe and Tool Co.

St. John—

T. S. Simms and Co., Ltd.
Puddington, Wetmore, Morrison, Ltd.
T. McAvity and Sons, Ltd.
C. H. Peters' Sons.

Bathurst—

The Bathurst Lumber Co.

Chatham—

J. B. Snowball Co., Ltd.

Hantsport—

Hantsport Fruit Basket Co.

Windsor—

Windsor Furniture Co.

Fredericton—

Hartt Boot and Shoe Co. (J. D Palmer).
A. R. Slipp (President Board of Trade).

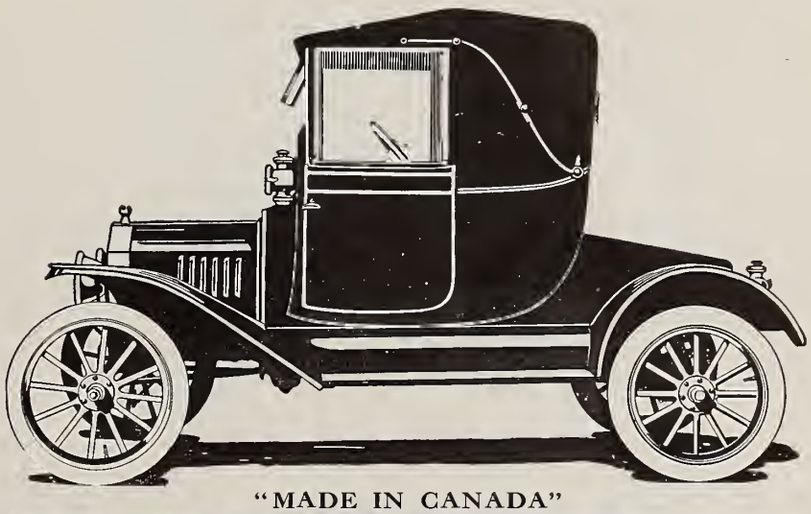
IMPORTANT NEW INDUSTRY IN VANCOUVER.

The Imperial Oil Company, Ltd., who have just completed the first unit of their extensive oil refining plant at Port Moody, on Burrard Inlet, near Vancouver, have the intention of entering into the export trade in coal-oil and gasoline to Japan, China, and possibly Australia.

For some time past the company have been large importers of crude California oil, for which there is a rapidly growing demand for railway and steamship fuel, and have built large storage tanks at Vancouver and Prince Rupert. A regular fleet of six steamers of the Standard Oil Company of California carry the crude oil from San Francisco.

The new plant at Port Moody, B.C., has been under construction for nearly a year, and the first unit is now practically ready for operation, the first shipment of oil having been just delivered. The cost of the plant is upward of one million dollars, and includes four stills and thirty-seven storage tanks, the largest of which is ninety-four feet diameter.

It now transpires that the company intend to refine Peruvian oil, not Californian, and the first shipment has just arrived at Vancouver by the steamer "Azov," which has, we understand, been purchased by the company, together with the tanker "Cuddo," as the first units in a fleet to carry the crude Peruvian oil to the Vancouver refinery.



"MADE IN CANADA"

The Ford Coupelet

A car of style in a class by itself. Beauty in design. Rich in appointment. Roomy and comfortable. Every detail in material, make and finish carries the highest quality. Ford efficiency and large production making possible the following price

Fully Equipped (*f.o.b. Ford, Ont.*) **$850**

Buyers of this practica Ford car will share in profits, if we sell at retail 30,000 new Ford cars between August 1914 and August 1915. Write for catalog (I—1).

Ford Motor Company OF CANADA, LIMITED.

FORD -:- ONTARIO

Ford THE UNIVERSAL CAR

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

AGENCIES WANTED.

Western Canadian firm of manufacturers' representatives, headquarters in Winnipeg, well-established connection through to Vancouver, are desirous of representing Eastern Canadian manufacturers on commission basis. Address Box 5, Industrial Canada.

402. **Glassware.**—A London firm makes inquiry for names of Canadian glass manufacturers able to supply lamp chimneys, globes and shades for gas-lighting.

403. **Automobile Tires.**—A Glasgow corre pondent is open to undertake an agency for Canadian manufacturers of automobile tires.

404. **Boiler Tubes, Plates, Shafting, etc.**—A North Country firm would like to hear from Canadian manufacturers of boiler tubes for marine boilers, mild steel sheel plates and furnace plates for marine boilers, and mild steel propeller shafts, tunnel shafting, and thrust shafts for marine engines, of which they seek supplies.

405. **Birch Logs.**—A Manchester firm of timber importers wishes to get in touch with Canadian exporters of Quebec and St. John birch logs. This firm is in a position to handle five or six thousand logs every year.

406. **Douglas Fir Planks.**—A Manchester firm of timber importers wishes to get in touch with Canadian exporters of British Columbia Douglas fir planks, from 4 to 8 inches thick.

407 **Telegraph Poles.**—A Scottish firm of Government contractors would be glad to hear from Canadian shippers of telegraph poles, of which they handle large quantities.

408. **Biscuits.**—A South African commission house requests immediate correspondence with full particulars re Canadian agency for biscuits.

409. **Railway Ties.**—An Irish firm invites Canadian manufacturers to quote, delivered Belfast, on 25,000 to 30,000 railway ties made up of 9 ft. x 10 in. x 5 in. and also 5 ft. x 9 in. x 4½ in.

410. **Bone Meal and Dried Blood.**—A London firm seeks supplies of bone meal and also dried blood, and invites offers from Canadian producers.

411. **Paper.**—A London firm who are buyers of various kinds of paper, and especially of news, invite offers from Canadian manufacturers.

412. **Export trade to the United Kingdom and South Africa.**—A London firm who are opening a branch in Toronto would be glad to negotiate with Canadian manufacturers and shippers seeking an outlet in the United Kingdom and in South Africa.

413. **Wood Pulleys.**—A first-class Glasgow house is desirous of getting in touch with manufacturers of wood pulleys. This is an important firm in this line of business.

THE
New Zealand Shipping Company, Limited
CANADA
TO
Australia and New Zealand

Regular monthly sailings from Montreal in summer and St. John in winter, calling at Adelaide, Melbourne and Sydney (Australia), and Auckland, Wellington, Lyttelton and Dunedin (New Zealand). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

The New Zealand Shipping Co.
LIMITED
213 Board of Trade Building, Montreal

Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B. in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth) East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

For rates of freight and other information apply to

ELDER DEMPSTER & CO., Limited
318-319 BOARD OF TRADE BUILDING - - MONTREAL
Toronto Agent: S. J. SHARP, 19 Adelaide E.

420. **Railway Ties.**—A London firm which has large inquiries for cedar and other railway ties sawn square invites quotations c.i.f. Liverpool and from Canadian manufacturers.

421. **Window Glass.**—A London firm reports a large demand for window glass, and asks for names of Canadian manufacturers.

422. **British Columbia Fir.**—A number of French firms ask to be placed in touch with British Columbia fir dealers wishing to do business in France, Algeria, Tunis and Morocco.

423. **Railway Ties.**—A firm in Rotterdam wishes to obtain quotations from Canadian shippers for 60,000 pine and 40,000 oak railway ties. Particulars of sizes, etc., can be obtained on application to the Department of Trade and Commerce, Ottawa, report No. 515.

424. **Wood Tubs.**—An Irish firm desires the addresses of Canadian manufacturers who can supply them with cheap wood tubs.

425. **Motor Agricultural Machines.**—An established concern in Paris desires to communicate with manufacturers of motor agricultural implements such as steam tractors, motor-ploughs, etc., to obtain catalogues and conditions and introduce same on French market in view of favorable circumstances caused by the state of war, as regards lack of labor and draught horses.

426. **Agency.**—A London firm desire to represent Canadian exporters of the following raw materials: Lubricating oil and grease, varnish, paint, chemical, soap, candle, disinfectant, leather (dressers', tanners' and curriers'), paper, drysaltery, polish, blacking, rolling mill, tinplate mill, tarpaulin, sack and bag, rope and twine, boiler composition and fluid, produce.

427. **Agency.**—A gentleman in Brisbane who has been a resident of that city for over 20 years desires to act as Canadian agent for manufacturers of paper of all kinds, twines, toys, tobacco, cigars, boots and shoes.

BAWDEN PUMPS

For All Purposes



The pumps backed by a grand reputation and the finest installations in Canada.

BAWDEN BASKET STRAINERS AND PIPE FLANGES

BAWDEN MACHINE CO., Limited
133 STERLING ROAD, TORONTO, CANADA



For Severe Service Use

JM Mastic Flooring

A flooring like that of the American Express Co., La Salle St. Depot, Chicago, shown above, which is subjected to the constant grinding of heavy trucks, *must* be tough and durable.

After careful investigation of other floorings, it was decided to use J-M Mastic for this installation—because of its known ability to withstand hard wear and tear indefinitely.

Due to its resiliency, J-M Mastic Flooring is easy on the feet of employes and reduces sound transmission to a minimum. And owing to its peculiar holding qualities, it prevents slipping.

Absolutely sanitary. Can't originate dust. Won't absorb oils or greases and, being waterproof, can be cleaned by simply flushing.

WRITE NEAREST BRANCH FOR "J-M MASTIC BOOKLET"

THE CANADIAN H. W. JOHNS-MANVILLE CO., LIMITED

Toronto Montreal Winnipeg Vancouver 2348

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.

SHEETS TUBES COPPER & BRASS AND RODS

SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT

115-121 SUMACH STREET - - - TORONTO, CANADA

You can get more out of the VICTOR

because we put more into it

That word "quality," in **our** factory, is not for vague, general use. It's a **real principle,** the reason for every step we take in the manufacture and selling of

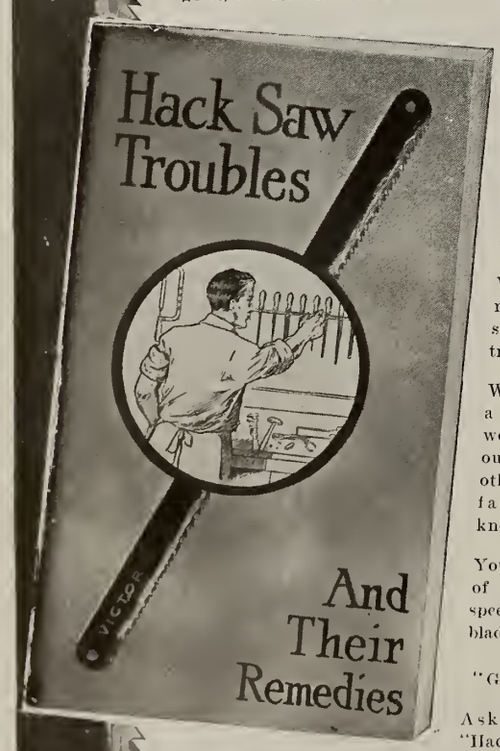
VICTOR Hack Saws

We pay more for the VICTOR Special Private Formula Steel that goes into the VICTOR.

More time and money spent on the machines that make the VICTOR, and our special processes of manufacture—

More inspections, and we inspect more carefully—

More blades rejected as being not up to our high standard (and most of those rejected you would consider good, serviceable blades)—



We bundle, box and ship the VICTOR a little more carefully—

We protect our retailers better, give them more and better sale helps, more and better real service—

We give the user more assistance in solving his hack saw troubles—

We do all these things a little better—in other words, we put more into our product—than any other hack saw manufacturer, because we know that—

You will get more out of the VICTOR — more speed, more cuts per blade, more satisfaction.

"Get a box and try 'em."

Ask for free booklet, "Hack Saw Troubles and Their Remedies."

Catalog on request

VICTOR SAW WORKS, Ltd.

100 Adam St.

HAMILTON, ONT.

VICTOR HACK SAWS Get a Box and Try 'em

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Cardston, Alta.

The Cardston Milling Company's plant has been purchased by the Ellison Milling Company, of Raymond, Alta. It is their intention to enlarge and remodel the flour mill.

Edmonton, Alta.

A large lumber mill is being erected by the Alberta & Great Waterways Railways Company.

Work is progressing rapidly on the new armory which the Dominion Government is building here at a cost of $286,000.

Medicine Hat, Alta.

The Hedley Shaw Milling Co.'s new mill at Medicine Hat covers 130 x 42 feet, six storeys in height and of heavy brick and mill construction. The engine and boiler room 42 x 80 feet, and ten monolithic concrete tanks each 90 feet in height and 20 feet in diameter, having a total capacity of 250,000 bushels, adjoin the mill building. The mill has a capacity of 3,000 barrels per day, but at present machinery has been installed to grind only 1,500 barrels daily. J. A. I. Hunt will be manager of the new mill, which is affiliated with the Maple Leaf Milling Co.

Gilbert Hunt, of Walla Walla, Wash., who incorporated the Dominion Harvester Co. of Medicine Hat, has come to an agreement with the Alberta Foundry Co., in this city, and work may be started at once.

BRITISH COLUMBIA.

Burrard Inlet, B.C.

The lowest tender, for the constructon of a Pacific Terminal Elevator to be built here by the Government at an estimated cost of $1,000,000, was put in by the firm of Barnet, McQueen & Company, Fort William and Minneapolis.

Comaplix, B.C.

The saw and planing mill of the Forest Mills of British Columbia, Limited, Revelstoke, B.C., have been totally destroyed by fire. Owners will rebuild next spring.

New Westminster, B.C.

The Mackie Mill & Mercantile Company of Gettysburg, Wash., will shortly commence work on the erection of a shingle mill which will have a capacity of 200,000 shingles per day.

Plans are drawn for new market building on 10th Street, for the city council, estimated to cost $40,000.

North Vancouver, B.C.

Specifications for second unit of $5,000,000 shipbuilding plant on Lynn Creek have been submitted at Ottawa for approval. Construction of unit will be started in about three weeks. Dominion Shipbuilding & Drydock Company, 14 Canada Life Bldg., are the owners.

South Vancouver, B.C.

The Standard Refining Company, Edmonton, Alberta, are contemplating the erection of a branch factory at the foot of Main Street for the manufacture of oils and greases. Estimated cost is $4,000.

FINE PERIOD FURNITURE

Announcing a New Jacobean Suite "Made in Canada"



No. 1038—The Jacobean Bedroom Suite to which this Chiffonier belongs is made of fine quality black walnut and mahogany. Black walnut is rapidly coming back into favor again for furniture and interior trimmings, some of the finest and most modern homes on the other side being large users of this beautiful and refined wood. Drawer pulls are English of genuine antique pattern. Drawer interiors are made of mahogany. Chiffonier s also supplied with quaint, movable mirror or toilet.

IN the reproduction of this Jacobean Chiffonier with accompanying pieces, we have drawn our inspiration from examples best expressive of the period with the happy success indicated in the illustration here.

In outline and finish, it has the appearance of the genuine antique; in construction, it typifies that conscientious thoroughness so delightful to the lover of fine furniture. The illustration, though small, conveys some impression of the beauty of line and design which distinguishes the original. But the other features, the careful, studied, workmanship; rich, warm-toned coloring of fine woods, and the exquisite, mellow finish are things which must be seen to be properly appreciated.

By visiting the showrooms of your leading local dealer you will have an opportunity of judging the character and quality, not only of this piece, but of our entire line, and our ability to satisfy every requirement in high-class furniture at prices that will impress you as being eminently fair.

Our Handsome Booklet on Period Furniture

describes fully the prevailing period styles and how to distinguish them. It is not a catalogue, nor is it particularly an advertisement for ourselves. Indeed, it is more of a practical, illustrated guide-book to good furniture — interesting and informative—than anything else we can think of. It will be sent to your address for the nominal sum of 25c in stamps or silver. This amount does not cover the cost of printing let alone postage and packing. But we want you to become interested in better furnishings, not necessarily in our furniture, although that is expected, but in good furniture of any kind. We feel sure when you do that your interest will extend to our furniture as a matter of course.

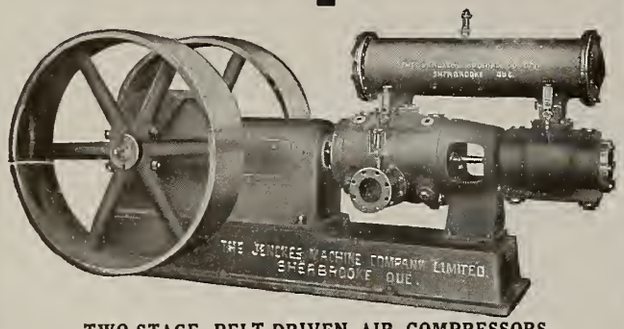
TORONTO FURNITURE CO., LIMITED

Showrooms and Cabinet Shops: 163-187 Dufferin St., Toronto

ALSO AN EXHIBIT IN THE KEELER BUILDING, GRAND RAPIDS

MEMBERS OF THE HOME MARKETS ASSOCIATION

Air Compressors



TWO-STAGE, BELT-DRIVEN AIR COMPRESSORS

EFFICIENT, RUGGED

Moderate in cost. Built to successfully stand severe and continuous service. Full range of sizes and types.

Write for Bulletins

THE JENCKES MACHINE CO., LIMITED

Works :
Sherbrooke, Que.
St. Catharines, Ont.

Sales Offices :
Halifax, Montreal
Toronto, Cobalt
South Porcupine
Vancouver



The Ritz-Carlton Hotel

SHERBROOKE STREET, MONTREAL

offers the Comfort, Service and Cuisine of the famous Ritz chain of Hotels and Restaurants round the world, at similar rates to those of other leading hotels in Canada.

Vancouver, B.C.

The town of West Vancouver have under consideration a waterworks system.

Victoria, B.C.

The sale of 200,000,000 feet of timber to the British Columbia Sulphite Co., operating at Mill Creek, Howe Sound, has recently been announced by the Hon. W. R. Ross, Minister of Lands.

The Dominion Government is expending the sum of $4,500,000 on public works in the vicinity of Victoria. This outlay does not include the Esquimalt Dry Dock.

The Hudson's Bay building now under construction by the British Columbia Construction Company is to be completed four storeys as originally planned.

MANITOBA.

Winnipeg, Man.

A pumping station will be built at Transcona.

There is a possibility that the Globe Pump Co., of Green Bay, Wis., one of the largest manufacturers of deep well pumps on the continent, will select a site here for their branch in Canada.

NEW BRUNSWICK.

Moncton, N.B.

A temporary car barn is being erected by the Moncton Tramway & Electricity & Gas Company. Plans will be prepared for the erection of a permanent building next spring.

St. John, N.B.

The new dock recently opened at West St. John has given steady employment for eight months to between 500 and 700 men. Fifteen million feet of lumber have been used in the building of cribs, 150,000 cubic yards of mined rock for ballast, and 200 carloads of cement in the concrete construction. Eleven million cubic yards of material have been used up to the present in reclamation. There is a good deal of reclamation yet to be done, but it will not interfere with the free use of the pier and warehouse. The C. P. R. has laid down two lines of track to the warehouse. The first passenger train went over this new track on the opening day of the dock, December 10th.

NOVA SCOTIA.

North Sydney, N.S.

It is understood that the Nova Scotia Steel and Coal Company has an order for steel from a Canadian manufacturing concern which is furnishing certain material to the Militia Department, and preparations are being made for the reopening of one of the open hearth furnaces. This will mean employment for about forty men, some of whom have been idle since the plant closed.

North Sydney, N.S.

Operations have started at the foundry of Thompson & Sutherland, which was damaged by fire a few months ago.

QUEBEC.

Drummondville, Que.

The match factory of the Canadian Match Company has been destroyed by fire.

Montreal, Que.

A permit has been obtained by the Canadian Rubber Company to construct alterations to its warehouse.

THE CANADIAN BANK OF COMMERCE

STATEMENT OF THE RESULT OF THE BUSINESS OF THE BANK FOR THE YEAR ENDING 30TH NOVEMBER, 1914.

Balance at credit of Profit and Loss Account, brought forward from last year	$ 384,529 98
Net profits for the year ending 30th November, after providing for all bad and doubtful debts	2,668,233 29
	$ 3,052,763 27

This has been appropriated as follows:—

Dividends Nos. 108, 109, 110 and 111, at ten per cent. per annum	$ 1,500,000 00
Bonus of one per cent. payable 1st June	150,000 00
" " " 1st December	150,000 00
Transferred to Pension Fund (annual contribution)	80,000 00
Subscription to Canadian Patriotic Fund	50,000 00
" The Canadian Red Cross Society	5,000 00
Balance carried forward	1,117,763 27
	$ 3,052,763 27

GENERAL STATEMENT.
30th November, 1914.

LIABILITIES.

TO THE PUBLIC—		
Notes of the Bank in circulation		$ 14,942,557 68
Deposits not bearing interest	$ 41,690,512 29	
Deposits bearing interest, including interest accrued to date	139,818,297 45	
		181,508,809 74
Balances due to other Banks in Canada		933,800 59
Balances due to Banks and Banking Correspondents elsewhere than in Canada		11,163,568 73
Bills payable		3,924,151 28
Acceptances under Letters of Credit		2,746,016 07
		$215,218,904 09
TO THE SHAREHOLDERS—		
Dividends unpaid		2,731 28
Dividend No. 111 and bonus payable 1st December		525,000 00
Capital paid up	$ 15,000,000 00	
Rest Account	13,500,000 00	
Balance of Profits as per Profit and Loss Account	1,117,763 27	
		29,617,763 27
		$245,364,398 64

ASSETS.

Current Coin	$ 16,923,230 20	
Dominion Notes	13,413,985 15	
		$ 30,337,215 35
Notes of other Banks	$ 2,019,301 00	
Cheques on other Banks	5,197,975 85	
Balances due by other Banks in Canada	17,500 00	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	5,782,385 67	
		$ 13,017,162 52
Dominion and Provincial Government Securities, not exceeding market value		3,295,411 87
British, Foreign and Colonial Public Securities and Canadian Municipal Securities		1,791,071 90
Railway and other Bonds, Debentures and Stocks, not exceeding market value		16,104,763 57
Call and Short Loans (not exceeding 30 days) in Canada on Bonds, Debentures and Stocks		8,926,859 91
Call and Short Loans (not exceeding 30 days) elsewhere than in Canada		18,750,526 61
Deposit with the Minister of Finance for the purpose of the Circulation Fund		760,641 36
		$ 92,983,653 09
Other Current Loans and Discounts in Canada (less rebate of interest)		132,168,482 26
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)		10,419,594 36
Liabilities of Customers under Letters of Credit, as per contra		2,746,016 07
Overdue Debts (estimated loss provided for)		733,826 88
Real Estate other than Bank Premises (including the unsold balance of former premises of the Eastern Townships Bank)	$ 1,252,344 80	
Less mortgage assumed	100,000 00	
		1,152,344 80
Mortgages on Real Estate sold by the Bank		382,002 93
Bank Premises at cost, less amounts written off	$ 4,986,991 69	
Less mortgage assumed on property recently purchased	300,000 00	
		4,686,991 69
Other Assets not included in the foregoing		91,486 56
		$245,364,398 64

B. E. WALKER, President.

ALEXANDER LAIRD, General Manager.

REPORT OF THE AUDITORS TO THE SHAREHOLDERS OF THE CANADIAN BANK OF COMMERCE.

In accordance with the provisions of sub-sections 19 and 20 of Section 56 of the Bank Act, 1913, we report as follows:

We have audited the above Balance Sheet with the books and vouchers at Head Office and with the certified returns from the branches, and have obtained all the information and explanations that we have required, and we are of the opinion that the transactions of the Bank which have come under our notice have been within the powers of the Bank.

We have checked the cash and verified the securities representing the investments of the Bank at its chief office and principal branches at a date other than and in addition to the verification at 30th November and found that they were in agreement with the entries in the books of the Bank relating thereto.

In our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Bank according to the best of our information and the explanations given to us, and as shown by the books of the Bank.

T. HARRY WEBB, C.A., of Webb, Read, Hegan, Callingham & Co.
JAMES MARWICK, C.A., of Marwick, Mitchell, Peat & Co.
} Auditors.

THE
Canadian Bank of Commerce

ESTABLISHED 1867

DIRECTORS

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L., President.
Z. A. LASH, ESQ., K.C. LL.D. - - Vice-President.

John Hoskin, Esq., K.C., LL.D. — G. F. Galt, Esq.
J. W. Flavelle, Esq., LL.D. — Alexander Laird, Esq.
A. Kingman, Esq. — William Farwell, Esq., D.C.L.
Hon. Sir Lyman Melvin Jones. — Gardner Stevens, Esq.
Hon. W. C. Edwards. — A. C. Flumerfelt, Esq.
E. R. Wood, Esq. — George G. Foster, Esq., K.C.
Robert Stuart, Esq. — Chas. Colby, Esq., M.A., Ph.D.
Sir John Morison Gibson, K.C.M.G., K.C., LL.D. — G. W. Allan, Esq.
H. J. Fuller, Esq.
F. P. Jones, Esq.

General Manager - ALEXANDER LAIRD.
Assistant General Manager - JOHN AIRD.

Paid-up Capital - $15,000,000
Reserve Fund - $13,500,000

The Bank has branches in every Province in Canada, also in New York, Seattle, San Francisco, Portland, Ore., Mexico City, St. John's, Nfld., and London, Eng.

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . . $25,000,000
Capital Paid up $11,560,000
Reserve & Undivided Profits $13,000,000
Total Assets $180,000,000

HEAD OFFICE, MONTREAL

BOARD OF DIRECTORS

H. S. Holt, President — E. L. Pease, Vice-President
E. F. B. Johnston, K.C., 2nd Vice-President

Wiley Smith — D. K. Elliott — Wm. Robertson
Hon. D. MacKeen — W. H. Thorne — A. J. Brown, K.C.
Jas. Redmond — Hugh Paton — W. J. Sheppard
G. R. Crowe — T. J. Drummond — C. S. Wilcox
A. E. Dyment

OFFICERS

E. L. Pease, General Manager
C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY — Corner William and Cedar Sts

Savings Department at All Branches

The name of the Du Pont Safety Powder Co. of Canada, Limited, has been changed to the Palmer Perchlorate Powder Co., of Canada, Limited.

The machinery of the new Armstrong-Whitworth plant was started on December 12th, and the works were declared open by Mr. George G. Foster, K.C., First Vice-President. The company have 250 acres, extending to the St. Lawrence River front. The floor area of the plant covers 65,000 square feet. One hundred and fifty men are employed at present. Up to date, $1,250,000 has been spent on the plant. It is under the direction of Mr. M. J. Butler, C.E., and will manufacture the highest grades of steel.

Those who are pessimistic about building prospects have been surprised by the attitude of the A. B. See Electric Elevator Company of Canada, Limited, who are taking advantage of the dull days to completely equip a large elevator factory in the City of Montreal, where in future they will manufacture everything in connection with their elevators. The A. B. See Company will place large orders for machinery at an early date.

The Cedar Rapids Power Company has awarded a contract for a number of electric heaters to the Federal Engineering Company.

A co-operative association which will be known as the Canadian Shoe Manufacturers' Export Association has been formed here. The company, which embraces all the leading shoe manufacturers in the city, will make a determined effort to procure a portion of the shoe orders now being placed by the Imperial Government, and to this end will immediately send A. R. Angus, of the Ames-Holden-McCready Company, and Oscar Dufresne, of Dufresne & Locke, to interview the War Office in London.

Tenders are being received now by Mr. Sydney Comber, 1215 Green Avenue, Westmount, in connection with the construction of three-storey reinforced concrete, brick and steel stables at an estimated cost of $20,000.

The MacArthur Concrete Pile & Foundation Company have sold to the Oriental Compressol Company of Tokio, Japan, the patent rights to drive pedestals in Japan. The MacArthur Pile & Concrete Foundation Company have appointed Douglas Milligan Company as their sales agents for Eastern Canada, with main office in the new Birks Building, Montreal, and branch at 95 King Street East, Toronto.

Several buildings of the huge floating dry dock and ship repairing plant, which is being constructed by Messrs. Vickers, Limited, England, are nearing completion. A study of the general lay out shows that the plant when completed will include the following units: Fitting-out basin, floating dock, mechanics' shop, joiners' shop, pump house, ironworkers' shed, smiths' shop, plumbers' shop, gas producer plant, shipbuilding berth, central heating station, gate house and general stores, electrical shop, test house, power house, paint shop, boiler shop, engine shop, brass foundry, administrative offices; also garage, ambulance room, stores, etc. The site covers 40 acres and the total cost of the plant will be about $5,000,000.

Quebec, Que.

The next Legislature will be asked by the city council for power to make an additional loan of $500,000 to enable this city to municipalize, at an approximate cost of one million dollars, the light and power service of the Dorchester Electric Company.

FORTY-FIFTH ANNUAL STATEMENT

OF

The Royal Bank of Canada

GENERAL STATEMENT
30TH NOVEMBER, 1914

LIABILITIES.

TO THE PUBLIC:		
Notes of the Bank in Circulation		$ 13,505,255.49
Deposits not bearing interest	$ 31,224,129.64	
Deposits bearing interest, including interest accrued to date of statement	104,827,078.59	
		$136,051,208.23
Balances due to other Banks in Canada	$ 256,072.53	
Balances due to Banks and Banking Correspondents in the United Kingdom and foreign countries	2,280,629.08	
		2,536,701.61
Bills Payable		744,389.55
Acceptances under Letters of Credit		1,481,717.92
		$154,319,272.80
TO THE SHAREHOLDERS:		
Capital Stock paid in		11,560,000.00
Reserve Fund	$12,560,000.00	
Balance of Profits carried forward	614,062.25	
		13,174,062.25
Dividend No. 109 (at 12 per cent. per annum), payable December 1st, 1914	$ 346,800.00	
Dividends Unclaimed	3,919.31	
		350,719.31
		$179,404,054.36

ASSETS.

Current Coin	$12,995,483.75	
Dominion Notes	12,688,371.25	
	$25,683,855.00	
Deposit in the Central Gold Reserves	2,000,000.00	
Deposit with the Minister for the purpose of the Circulation Fund	578,000.00	
Notes of other Banks	2,525,205.79	
Cheques on other Banks	5,752,485.25	
Balances due by other Banks in Canada	4,351.82	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	3,144,502.41	
Dominion and Provincial Government Securities, not exceeding market value	1,158,568.75	
Canadian Municipal Securities and British and Foreign and Colonal Public Securities other than Canadian, not exceeding market value	2,185,062.60	
Railway and other Bonds, Debentures and Stocks, not exceeding market value	13,557,741.12	
Call Loans in Canada, on Bonds, Debentures and Stocks	8,574,058.06	
Call and Short (not exceeding thirty days) Loans elsewhere than in Canada	6,080,847.19	
		71,244,677.99
Other Current Loans and Discounts in Canada (less rebate of interest)	$84,585,972.95	
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)	15,002,488.08	
Overdue Debts (estimated loss provided for)	568,198.87	
		100,156,659.90
Real Estate other than Bank Premises		600,000.00
Bank Premises, at not more than cost, less amounts written off		5,861,180.37
Liabilities of Customers under Letters of Credit, as per contra		1,481,717.92
Other Assets not included in the foregoing		59,818.13
		$179,404,054.36

H. S. HOLT,
President.

EDSON L. PEASE.
General Manager.

AUDITORS' CERTIFICATE.

We report to the Shareholders of The Royal Bank of Canada:—

That we have obtained all the information and explanations required by us.

That in our opinion the transactions of the Bank which have come under our notice have been within the powers of the Bank.

That we have checked the cash and verified the securities of the Bank at the Chief Office at 30th November, 1914, as well as at another time, as required by Section 56 of the Bank Act, and that we found they agreed with the entries in the books in regard thereto. We also, during the year, checked the cash and verified the securities at the principal branches.

That the above Balance Sheet has been compared by us with the books at the Chief Office and with the certified returns from the Branches, and in our opinion is properly drawn up so as to exhibit a true and correct view of the state of the Bank's affairs according to the best of our information and the explanations given to us and as shown by the books of the Bank.

JAMES MARWICK, C.A.,
S. ROGER MITCHELL, C.A., Auditors.
Members of the Firm of Marwick, Mitchell, Peat & Co.

Montreal, Canada, December 18th, 1914.

PROFIT AND LOSS ACCOUNT.

Balance of Profit and Loss Account, 29th November, 1913		$1,015,119.58
Profits for the year, after deducting charges of Management and all other expenses, accrued interest on deposits, full provision for all bad and doubtful debts and rebate of interest on unmatured bills	1,886,142.67	
		$2,901,262.25
APPROPRIATED AS FOLLOWS:		
Dividends Nos. 106, 107, 108 and 109, at 12 per cent. per annum	$1,387,200.00	
Transferred to Officers' Pension Fund	100,000.00	
Written off Bank Premises Account	250,000.00	
Contribution to Patriotic Funds	50,000.00	
Depreciation in Investments	500,000.00	
Balance of Profit and Loss carried forward	614,062.25	
		$2,901,262.25

H. S. HOLT,
President.
Montreal, 18th December, 1914.

EDSON L. PEASE.
General Manager.

Stratford, Ont.

It has been decided to recommend to the Council an extension until 1915 in which to erect the addition to the local plant of the Stratford Manufacturing Company.

Toronto, Ont.

The capital stock of the Canadian National Carbon Company has been increased from $70,000 to $500,000.

Good progress is being made on the steel work of the new building which the Excelsior Life Association is erecting here at a cost of $500,000.

A shot tower 100 feet high will be built by the Canada Metal Company.

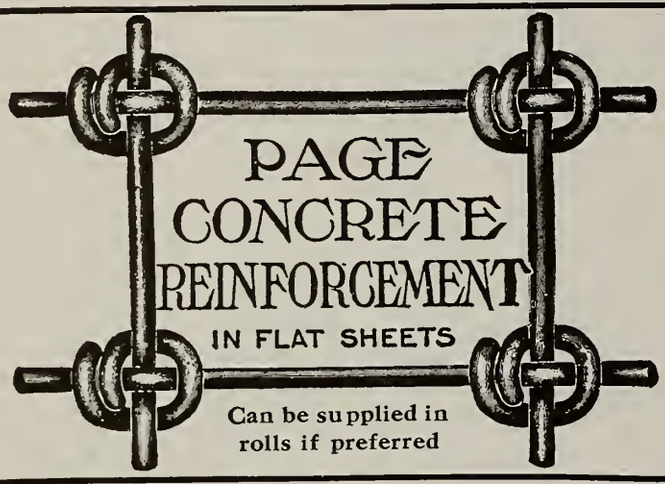
Welland, Ont.

The new factory of the Tuttle-Bailey Co. of Canada, being erected in the South Ward, has been completed and will be occupied some time this week.

SASKATCHEWAN.

Moose Jaw, Sask.

A large flax mill and elevator will be erected by the International Linseed Oil Company, Cincinnati, Ohio. The elevator will have a capacity of 250,000 bushels.



For Concrete Road Pavement, Walks, Building Floors, Etc.

We are the *originators* of this wire reinforcement in flat sheets, and it is coming into universal use wherever introduced. We have supplied many carloads of it this past season.

The standard mesh for road pavement is 6 x 12 inches; for bridges and building floors, the standard is 3 x 6 inches. Also, other meshes as desired. All sheets 4 feet wide, and any length specified that can be loaded in cars.

Samples will be sent upon request

We also supply Iron Fences, Fire Escapes, Office Wire Work, and all kinds of Builders' Wire and Iron Work.

The Page Wire Fence Co., Limited

Dept. 20a

1137 King St. W. TORONTO — 505 Notre Dame St. W. MONTREAL — 87 Church St. WALKERVILLE — 39 Dock St. ST. JOHN, N.B.

POLSON IRON WORKS
LIMITED
Toronto - Canada

STEEL SHIPBUILDERS
ENGINEERS AND
BOILERMAKERS

Hydraulic and Dipper Dredges, Steel and Composite Steamers and Yachts, Marine and Stationary Engines and Boilers. :: ::

Office and Works
ESPLANADE STREET EAST
Toronto

AGENTS FOR QUEBEC
WATSON JACK & CO.
709 Power Building - Montreal, Que.

ASBESTOS

WE CARRY THE LARGEST COMPLETE STOCK IN CANADA

ASBESTOS SHINGLES
ASBESTOS LUMBER
ASBESTOS MILLBOARD
ASBESTOS PAPER
ASBESTOS PACKING
ASBESTOS ROOFING
ASBESTOS PIPE COVERING
ASBESTOS CEMENT
ASBESTOS CURTAINS

CANASCO RUBBER ROOFING 1, 2 AND 3 PLY
COTTON WASTE, WHITE AND COLORED, AND WOOL WASTE
OAKUM, PLUMBERS AND NAVY
BEAVER BOARD
RAILWAY AND ENGINEERS' SUPPLIES

WE EMPLOY A LARGE STAFF OF EXPERIENCED WORKMEN AND UNDERTAKE THE COVERING OF STEAM PLANTS AND COLD STORAGE ANYWHERE IN CANADA.

CANADIAN ASBESTOS COMPANY
42 TO 48 YOUVILLE SQUARE — MONTREAL — MAIN 332 AND 611

The Pride of Ownership

What a few owners have written about Russell Cars



Russell Cars are manufactured in Canada in the Russell Shops at West Toronto.

MODELS AND PRICES

Russell Six 30	.....	$1750.00
" Four 32	.....	$2650.00
" Six 48	.....	$4500.00

F.O.B. WEST TORONTO

Mr. D. Simpson, Ridgetown Milling Company, Ridgetown, Ont., writes:—

"The pleasure and satisfaction I have had with the Knight engine motor car bought from your Company is beyond description."

Mr. W. B. Snowball, G. B. Snowball Company Ltd., Chatham, N.B., says:—

"I am almost through my second season and have not yet had a stop on the road or any trouble. One tire still has Toronto air in it."

Mr. John A. Walker, Director of Walker Parker Co., Ltd., Toronto, says:—

"My car is a credit to the maker."

Henry Y. Smith, Moose Jaw, Sask., writes:—

"My engine has required absolutely no adjustment. The same applies to the differential and the transmission."

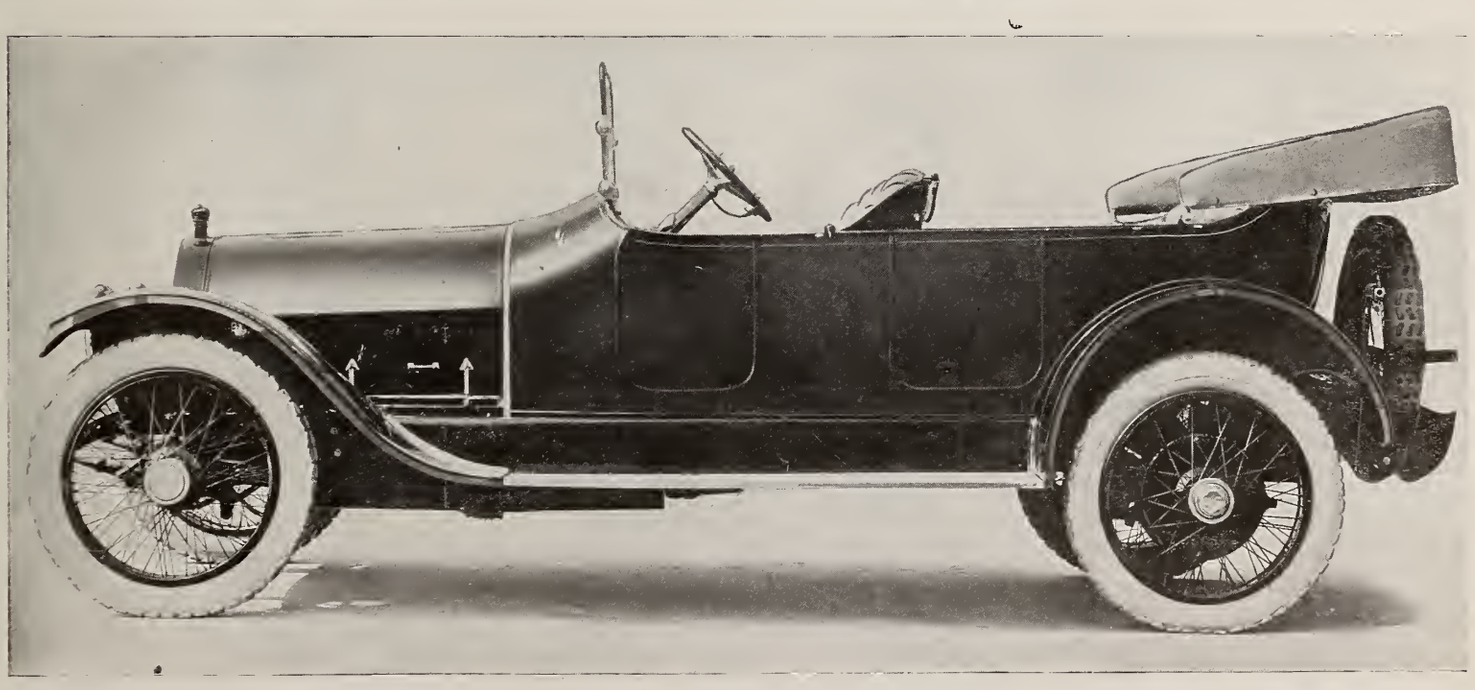
Mr. F. G. Stratton, Vancouver, states:—

"The car has proved very reliable and extremely comfortable on rough roads, surpassing indeed my expectations or the representations of the car to me before I purchased it."

Mr. F. J. Sharpe, Barrister, Winnipeg, remarks:—

"I consider the lines of the car and the general finish extremely beautiful. I have ridden in a great number of more expensive cars, but have yet to find one that rides as comfortably. The springs are excellent."

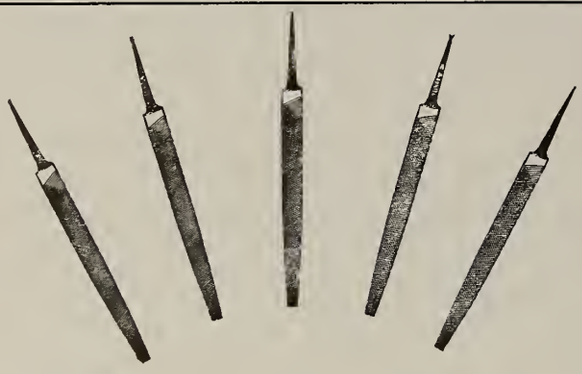
Ask for "Pride of Ownership." It will tell you how the Russell cars meet Canadian motoring needs.



RUSSELL MOTOR CAR COMPANY, LIMITED

Executive Offices and Works—WEST TORONTO

Branches: Toronto, Montreal, Hamilton, Winnipeg, Calgary and Vancouver.



The Same

Yesterday
To-day
To-morrow

It's a waste of time and money to "break in" different makes of files. The wisest way is to standardize your files. To use only

KEARNEY & FOOT
GREAT WESTERN
AMERICAN
ARCADE
GLOBE

Made in Canada

These famous files never vary in quality or "cut." Every step in their making is under our control. From furnace to file, we direct every operation.

That's why deep "cut"—perfect work—and splendid balance—distinguish all Nicholson-Made-Files.

4,000 patterns—
50 years' experience—
60,000,000 output annually—
mean the right file—at the right price.

It "costs less to use more." It's cheaper to use two files than to wear an old one out.

NICHOLSON FILE COMPANY
PORT HOPE Dealers Everywhere ONTARIO

"FILE FILOSOPHY" is the most interesting little booklet ever written on files. A free copy and our catalog are yours for the asking.

EVIDENCE!

Montreal uses more wire and cable than any other city in Canada. That

Northern Electric
"ADANAC"
and
"HIGRADE"

dominate in this field through quality and service is evidenced by this partial list of installations:

Transportation Building
Dominion Express Building
Bank of B.N.A.(Head Office)
Ritz Carlton Hotel
Birks Building
Royal Trust Company Building
McGill University—Medical and Engineering Bldgs.
Syndicate Building
Art Gallery
Harbor Elevators, Nos. 1 and 2
G.T.R. Elevator, Windmill Point
Canadian Rubber Company
Canadian Vickers Limited
C.P.R.—Windsor Station and Train Sheds, Place Viger Hotel and Station
Canada Cement Co.
Scroggie Building
Jacobs Building
Goodwins Limited
Imperial Theatre
Princess Theatre
Lindsay Building
Post Office—Head Office, St. James St. Two Uptown Offices
City Hall and Annex
Frontenac Breweries
Ford Motor Company
All Bell Telephone Exchanges
Bordeaux Jail
Grey Nunnery, St. Laurent
Sommer Building
Westmount High School
United Shoe Machinery Co.
St. Lawrence Sugar Refinery
Canadian Sugar Refinery
Belding, Paul Corticelli Co.
Dominion Box Co.
Reford Building
St. George's R.C. Church
Park Lafontaine
C.P.R. Angus Shops
G.T.R. Point St. Charles Shops
Montreal City Filtration Plant
Montreal Water & Power Co.
Dominion Glass Company
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W. V. Dawson, St. Urbain St.

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Northern Electric Company
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WINNIPEG REGINA CALGARY
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PEASE FOUNDRY COMPANY, LIMITED.

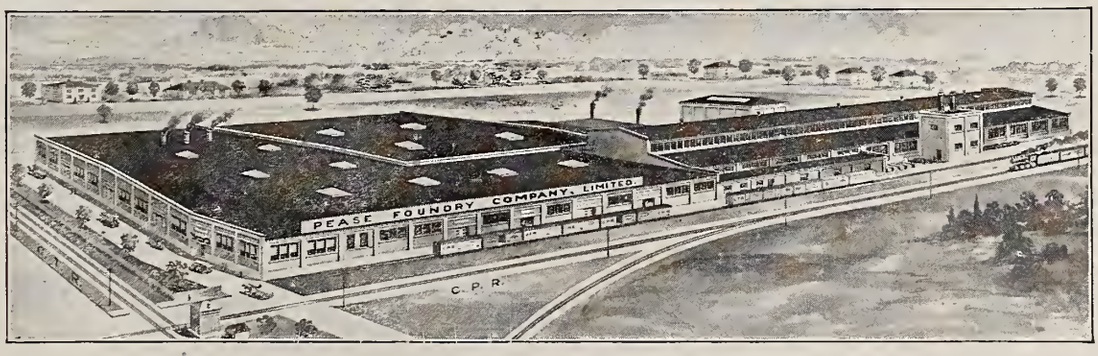
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TORONTO

WORKS:
BRAMPTON

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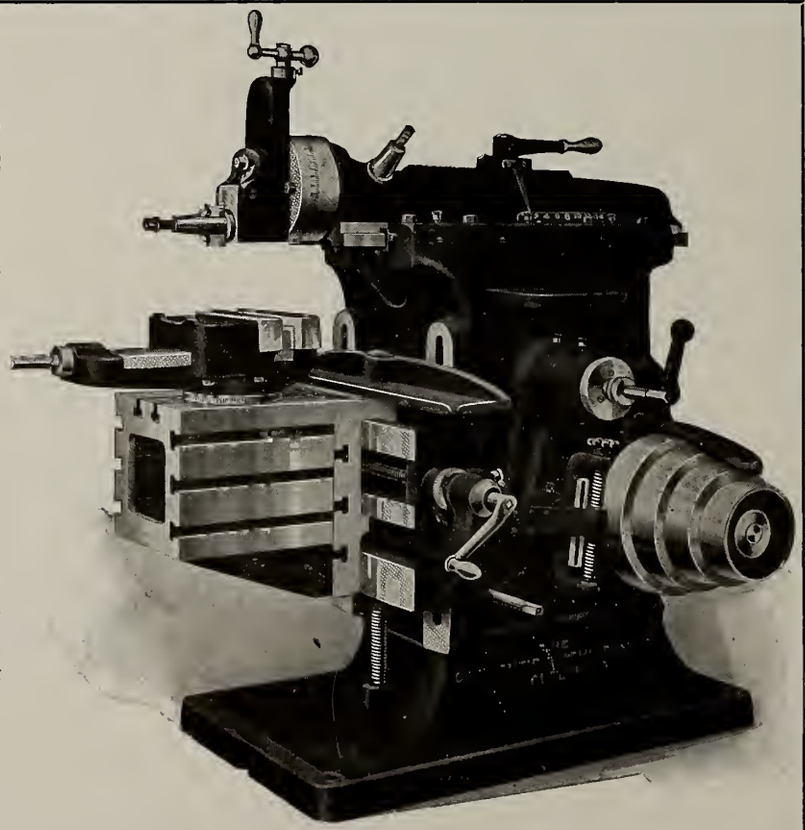
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will pay for their installation in from three to five years in the saving of Insurance Premiums.

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Hoisting, Excavating, and Material-Handling Plant of

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is cheaper in the end.

Hoisting Engines, Steel Derricks, Derrick Fittings, "Faivrette" Clamshells, Centrifugal Pumps.

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M. BEATTY & SONS, LIMITED

MAIN OFFICE AND WORKS: Welland, Ont.

TORONTO BRANCH: 4th Floor, 154 Simcoe St.

AGENTS—H. E. Plant, 1790 St. James St., Montreal; Robert Hamilton & Co., Vancouver, B.C.; E. Leonard & Sons, St. Johns, N.B.; A. R. Williams Machinery Co., Winnipeg.

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.

ACETYLENE WELDING APPARATUS
*L'Air Liquide Society, Montreal, Que.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.
Hough Lithographing Co., Ltd., Toronto.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

AIR WASHERS
*The Canadian Service Co., Windsor, Ont.

ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE
E. L. Drewry, Winnipeg, Man.

ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

ALUMINUM CASTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS
*T. Pringle & Sons, Montreal.

ASBESTOS:
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS BUILDING LUMBER
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CEMENT SHINGLES
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CORRUGATED SHEATHING
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS MILLBOARD
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS PRODUCTS;
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS ROOFING SLATES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS SHEATHING:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto

ASBESTOS TEXTILES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS THEATRE CURTAINS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.

AUTOMATIC MACHINERY
*The Ford-Smith Machine Co., Ltd., Hamilton.

AUTOMATIC SPRINKLERS
*The General Fire Equipment Co., Ltd., Toronto. Ont.

AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

AWNINGS
*Smart-Woods, Ltd., Montreal.

AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS
*Smart-Woods, Ltd., Montreal.

BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal. Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN
*Berry Bros., Ltd., Winnipeg, Man.

BALL BEARING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

BANK AND OFFICE RAILINGS
*The Geo. B. Meadows. Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston. Ont.

BANK RAILINGS and CAGES:
*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London. Ont

BASEBALL GOODS
A. J. Reach Co., Toronto.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.
*The Canadian Fairbanks-Morso Co., Ltd., Montreal, Que.

BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Goldie & McCulloch Co., Ltd., Gadt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville, Ont.
*Smart-Woods, Ltd., Montreal.

BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER
E. L. Drewry, Winnipeg, Man.

BELT FASTENERS
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELT DRESSING:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
J. L. Goodhue & Co., Danville, P.Q
*Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal. Que.
*Gutta Percha & Rubber, Limited.

BELTING (stitched cotton duck)
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS
Samuel May & Co., Toronto.

BILLIARD TABLES
J. D. Clark Billiard Co., Winnipeg.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:
*A. C. Leslie & Co., Montreal.

BLANK BOOKS:
*Morton, Philips & Co., Montreal.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford. Ont.

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.

BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS
*Canadian H. W. Johns-Manville Co., Toronto.
Electric Boiler Compound Co., Ltd. Guelph. Ont.

BOILERS.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Canadian Allis-Chalmers, Limited, Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, London, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Jenckes Machine Co., Sherbrooke.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, heating:
*The Goldie & McCullough Co., Ltd. Galt.

BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.

BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BOILER STANDS
Anthes Feundry Ltd., Toronto.

BOLSTERS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:
*The National Acme Mfg Co., Montreal.

BOLT CUTTERS:
*Canada Machinery Corporation, Galt.

BOLTS AND NUTS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co. Ltd., Stratford, Ont.

BOOKLETS
Stone Limited. Toronto.
R. G. McLean, Toronto.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,
Ames-Holden-McCready, Ltd., Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

*For Display Advertisement See Index, Page 545

EDDY'S



MATCHES

BOWLING ALLEYS
Samuel May & Co., Toronto.

BOXES, cellular board:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
G. & J. Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAIDS AND TRIMMINGS
The Moulton Mfg. Co., Ltd., Montreal.

BRAKE SHOES
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS GOODS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
*Tallman Brass & Metal Co., Hamilton.

BRASS PLATES
Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS
Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

BRICK
National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway
*Canada Foundry Co., Ltd., Toronto.
Canadian Allis-Chalmers Ltd., Toronto.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton .
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters
Geo. Booth & Son. Toronto.

BROOMS
*Boeckh Bros. Co., Ltd., Toronto.
H. W. Nelson & Co., Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:
*Boeckh Bros., Ltd.. Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd. Toronto.

BUCKET TANKS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Ltd., Gananoque. Ont.

BUFFING and Polishing Machinery.
*The Ford-Smith Machine Co., Ltd., Hamilton.

BUILDING
Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed
Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING GRANITE
McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE:
*Northern Electric Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:
*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS
Hough Lithographing Co., Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CALENDARS, ADVERTISING NOVELTIES, etc.
Rolph & Clark, Ltd., Toronto.

CAMERAS
Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

CANVAS
*Smart-Woods, Ltd., Montreal.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PAPER:
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

CARBON PRODUCTS
Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
Canada Carbide Co., Ltd., Montreal, Que.

CARDBOARD
Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS
Toronto Carpet Mfg Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.
*Richard-Wilcox Canadian Co., Limitd, London, Ont.

CARRIERS, box and barrel
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal. Que.
*Wm. & J. G. Greey, Toronto.

CARS, industrial:
*Wm. & J. G. Greey, Toronto.
*Sheldons, Ltd., Galt.

CARTONS, lithographed
Harris Lithographing Co., Toronto.

CASEMENTS, steel
*Herbert Morris Crane & Hoist Company, Ltd.

CASTINGS:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

CASTINGS, brass and bronze:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:
*Galt Malleable Iron Co., Ltd Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound. Ont.

CAST IRON PIPE:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

CATALOGUE MAKERS
Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIN BLOCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Herbert Morris Crane & Hoist Company, Ltd.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford. Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS
Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO
Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel
The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S
*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Canadian H. W. Johns-Manville Co., Toronto.
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia. Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

*For Display Advertisement See Index. Page 545

BUSINESS AS USUAL

IN THE

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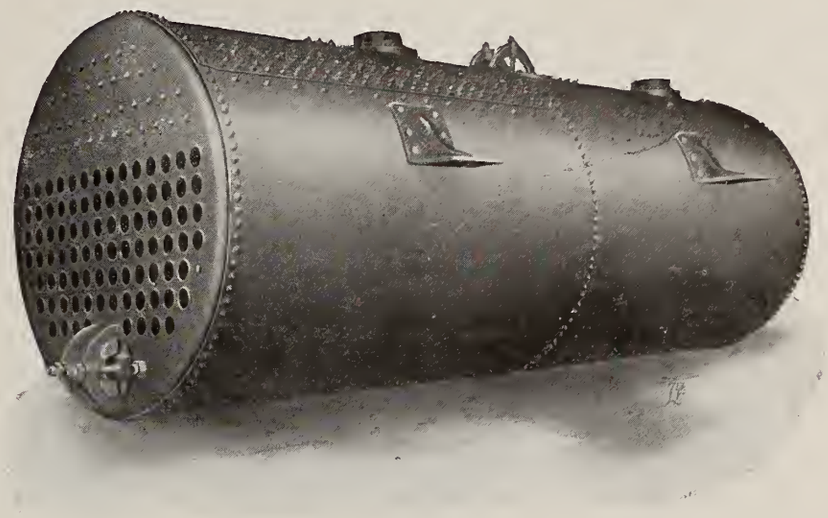
ALEX. C. LEWIS, Secretary

50 BAY STREET TORONTO, CANADA

CLUTCHES, conveyors.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.
COATS
Peerless Overall Co., Rock Island, Que.
COBALT OXIDE
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.
COCOA AND CHOCOLATE PREPARATIONS
Walter Baker & Co., of Canada, Ltd., Montreal, Que.
COFFEE
S. H. Ewing & Sons, Montreal, Que.
COFFEE IMPORTERS, Roasters and Manufacturers
C. H. Cochrane & Co., Ottawa, Ont.
COLD DRAWN SCREW STEEL:
*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD DRAWN SHAPES, flats, squares and hexagons:
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.
COLLAR BUTTONS
The Arlington Co., of Canada, Ltd., Toronto.
COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.
COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.
COLLARS AND CUFFS waterproof
Williams, Greene & Rome, Berlin, Ont.
COLORS
Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin Williams Co. of Canada, Ltd., Montreal, Que.
COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto.
COMMERCIAL STATIONERS
Rolph & Clark, Ltd., Toronto.
COMMERCIAL STATIONERY:
*Brown Bros., Ltd., Toronto.
*Morton, Phillips & Co., Montreal.
COMPRESSORS
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
CONCENTRATORS:
*Jenckes Machine Co., Sherbrooke.
CONCRETE COATINGS, paints, etc.
The Imperial Varnish & Color Co., Ltd., Toronto.
CONDUITS FOR INTERIOR WIRING
*Conduits Company, Ltd., Toronto.
CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Limited, Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.
CONTRACTORS' PLANT
The Western Steel & Iron Co., Ltd., Winnipeg, Man.
*M. Beatty & Sons, Ltd., Welland, Ont.
CONVEYORS:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jenckes Machine Co., Sherbrooke.
COOLING APPARATUS
*The Canadian Service Co., Ltd., Windsor, Ont.
COPPER:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
COPPERSMITHS
*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.
COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd. Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
COPPERWARE AND LANTERNS
Sheet Metal Products Co. of Canada, Ltd., Toronto.
COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
CORKS
S. H. Ewing & Sons, Montreal, Que.
CORK BOARD INSULATION
*Robinson Bros. Cork Co., Ltd., Toronto.
CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.
CORK, granulated
*Robinson Bros. Cork Co., Ltd., Toronto.
CORRUGATED BOXES:
*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORRUGATED PAPER:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORSETS
Dominion Corset Co., Quebec, Que.
COTTONADES
Hamilton Cotton Co., Hamilton, Ont.
COTTON TEXTILES:
*Dominion Textile Co., Montreal.
COUPLERS
*Canadian Steel Foundries, Ltd., Welland, Ont.
COUPLERS, steel bar:
*Canadian Steel Foundries, Ltd., Montreal.
COUPLINGS:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
CRANES:
*Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
CRANKSHAFTS
Canada Forge Co., Ltd., Welland, Ont.
CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Ltd. Montreal, Que.
CREAMERY AND CHEESE FACTOR MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Peterboro, Ont.
CREOSOTED MATERIALS:
*The Dominion Creosoting Co., Ltd. Vancouver, B.C.
CRUSHED STONE
The Hagersville Contracting Co., Ltd., Hagersville, Ont.
CRUSHERS, rock.
*Canadian Allis-Chalmers, Limited, Toronto.
CRUSHING ROLLS:
*Jenckes Machine Co., Sherbrooke.
CUES
Samuel May & Co., Toronto.
CUFFS
The Standard Shirt Co., Ltd., Montreal, Que.
CUPOLAS,
*Sheldons, Ltd., Galt.
The Northern Crane Works, Ltd., Walkerville.
CUPS, presentation
Standard Silver Co., Toronto.
CUPS, grease and oil
*The Canadian Winkley Co., Ltd., Windsor, Ont.
CURLED HAIR
Delany & Pettit, Ltd., Toronto.
CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.
CUTLERY
Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.
DENIMS
Hamilton Cotton Co., Hamilton, Ont.
DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
DESIGNERS
Ontario Engraving Co., Hamilton, Ont.
DESIGNERS and PRINTERS OF BOOKLETS, ETC.
Grip, Ltd., Toronto.
DINING ROOM SUITES
The George McLagan Furniture Co., Limited, Stratford, Ont.
DIES
*Butterfield & Co., Rock Island, P.Q.
DISC GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.
DISINFECTING APPARATUS
Spramotor Co., London, Ont.
DOOR HANGERS
*Canadian Allis-Chalmers, Ltd., Toronto.
*Richards Wilcox Canadian Co., Ltd., London, Ont.
DRAPERY AND UPHOLSTERY GOODS
Daly & Morin, Montreal, Que.
DREDGES
*M. Beatty & Sons, Ltd., Welland, Ont.
DRESSING, belt
Sadler & Haworth, Montreal, Que.
DRESS AND CLOAK TRIMMINGS
J. Henry Peters Co., 1 Mincing St., Toronto.
DRILLS:
*Canada Machinery Corporation, Galt.
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.
DRILLS, rock
*Canadian Allis-Chalmers, Ltd., Toronto.
DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.
DROP FORGINGS:
*Canadian Billings & Spencer, Ltd., Welland.
DROP HAMMERS:
*Canada Machinery Corporation, Galt.
DRY BATTERIES
*Northern Electric Co., Ltd., Montreal, Que.
DRY CELLS, electric
Canadian Carbon Co., Ltd., Toronto.
DRY COLORS
P. D. Dods & Co., Ltd., Montreal, Que.
The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
DRY KILN EQUIPMENT
*The Canadian Service Co., Ltd., Windsor, Ont.
DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto.
DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.
DYERS AND FINISHERS
R. Parker & Co., Toronto.
DYNAMITE
Canadian Explosives Ltd., Montreal, Que.
DYNAMOS.
*Canadian General Electric Co., Ltd., Toronto.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.
EIDERDOWN
Galt Knitting Co., Ltd., Galt.
ELECTRIC APPLIANCES.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd. Hamilton.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC BATTERIES.
*Canadian General Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.
ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg Co., Ltd., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.
ELECTRIC INSULATED WIRE
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC LAMPS.
*Canadian General Electric Co., Ltd., Toronto.
*Packard Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto.
ELECTRIC BATTERIES
Canadian Carbon Co., Ltd., Toronto.
ELECTROTYPING
Central Press Agency, Toronto.
ELECTRICAL SUPPLIES
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Crouse-Hinds Co. of Canada, Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Jones & Moore Electric Co., Ltd., Toronto.
*Munderloh & Co., Montreal.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto.
ELEVATORS:
*Jenckes Machine Co., Sherbrooke.
Turnbull Elevator Mfg. Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.
ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford.
ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd., Toronto.
ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.
ELEVATORS, hydraulic and electric
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
EMERY DRESSERS and STANDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY WHEEL GUARDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY WHEEL Safety Flanges
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.
ENAMELED KITCHENWARE:
*The Davidson Mfg. Co., Ltd., Montreal.
ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.
ENGINES
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Sheldons, Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.
ENGINES, gas and gasoline
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Massey-Harris Co., Ltd., Toronto.
ENGINES, gasoline tractor plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Limited, Montreal.
ENGINES, hoisting
*M. Beatty & Sons, Welland.
*Waterous Engine Works Co., Ltd., Brantford.
ENGINES, marine gasoline
*Canadian Fairbanks-Morse Co., Limited, Montreal.

*For Display Advertisement, See Index, Page 545

BOILERS



STANDARD RETURN TUBULAR BOILER

We make boilers of all kinds for any service.

We are also sole Canadian makers of Erie City Water Tube Boilers, Vertical and Horizontal.

The large number of pleased and satisfied owners of "INGLIS" Boilers is our best advertisement.

For (52) fifty-two years our boilers have been the standard. We have installations of our different types of boilers, which our representatives will be pleased to show to prospective purchasers. Write us for prices, etc.

Inglis' Products are "Made-in-Canada"

The John Inglis Company, Limited

ENGINEERS AND BOILERMAKERS

14 Strachan Avenue Toronto, Canada

MONTREAL OFFICE:
509 Canadian Express Building

Ottawa Representative:
J. W. ANDERSON, 7 Bank Street Chambers

ENGINES, steam plowing and threshing
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.
Rolph & Clark, Ltd., Toronto.
Stone, Limited, Toronto.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote
American Bank Note Co., Ottawa, Ont.

ENGRAVING:
*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.

ENVELOPES
Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

ESCUTCHEON PINS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR
Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS
Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto.

EXPLOSIVES, high
Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.
J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

FASTENERS, belt
Sadler & Haworth, Montreal, Que.

FENCES and GATES:
*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire
Banwell Hoxie Wire Fence Co., Hamilton, Ont.

FENCES, iron
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

FENCING, wire
The Great West Wire Fence Co., Ltd., Winnipeg, Man.
C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:
*The E. B. Eddy Co., Ltd., Hull.

FILES
Henry Disston & Sons, Ltd., Toronto.
*The Nicholson File Co., Port Hope, Ont.

FIRE ALARM APPARATUS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE DOOR HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:
*Waterous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:
*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS
*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.
*Canadian H. W. Johns-Manville Co., Toronto.
*The General Fire Equipment Co. Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford.

FIRE HOSE
*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.
Dunlop Tire and Rubber Goods Co., Limited, Toronto.
*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Rockwood Sprinkler Co., of Canada, Ltd., Montreal, Que.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FIREPROOF WINDOWS and DOORS:
*A. B. Ormsby, Ltd., Toronto.
*Geo. W. Reed & Co., Montreal.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King, Ltd., Montreal, Que.

FLAGS
*Smart-Woods, Ltd., Montreal.

FLASHLIGHTS
Canadian Carbon Co., Toronto.
Northern Electric Co., Ltd., Montreal, Que.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLOUR MILL MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.

FLUE LINERS
Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
*Sheldons, Ltd., Galt.

FORGINGS
Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton.

FOUNDRY EPUIPMENT
The Northern Crane Works, Ltd., Walkerville.
*The Ford-Smith Machine Co., Ltd., Hamilton.

FOUNTAIN FRUITS and Juices
J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:
*Dodge Mfg. Co., Ltd., Toronto.

FRICTION HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and buttons
J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air
Bedford Stove Co., Bedford, Que.

FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:
*A. C. Leslie & Co., Montreal.

GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
*The Waterous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground
S. F. Bowser & Co., Toronto.

GASOLINE
*The Imperial Oil Co., Ltd., Toronto.

GAS PRODUCERS:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

GENERATORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.
*International Engineering Works, Ltd., Amherst, N.S.

GENERATORS, electric
*Canadian General Electric Co., Ltd., Toronto.

GINS
The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd. Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS
A. R. Clarke & Co., Ltd., Toronto.

GLUE
Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.

GRATES.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*International Engineering Works, Ltd., Amherst, N.S.

GRAVITY CARRIERS
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal
*Northern Electric Co., Ltd., Montreal, Que.

GYPSUM, crushed
*Albert Mfg. Co., Hillsborough, N.B

GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HACK SAW FEEDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS TO DETAIL
Wilson Bros., Ltd., Collingwood, Ont.

HARNESS
Lamontagne Ltd., Montreal, Que.

HATS, men's straw
The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope
The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:
*The Goldie & McCullough Co., Ltd., Galt.

HEATING APPLIANCES:
*Sheldons, Ltd., Galt.
*Northern Electric Co., Ltd., Montreal, Que.

HEATING SYSTEMS
Gurney Foundry Co., Ltd., Toronto.

HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

HINGES:
*The Steel Co. of Canada, Ltd., Hamilton.

HOISTS
*Northern Crane Works, Ltd., Walkerville, Ont.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.
The Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

HUMIDIFIERS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES
Bawden Machine Co., Ltd., Toronto.

*For Display Advertisement See Index, Page 545



New Montreal Offices and Warehouses of Canadian Fairbanks-Morse Co., Limited
Designed and Constructed Under Our Supervision.

"Made-in-Canada"
Engineering Service

We are the oldest Industrial Engineering Organization doing business in Canada. Our business is entirely confined to Canada.

Our staff is complete. It includes Architects, Mill and Structural Engineers, Civil, Mechanical and Electrical Engineers.

No project is too large for us to undertake.

It will be to your profit to consult us when you are considering the erection of a new plant or the extension of your present one.

T. PRINGLE & SON, Limited

INDUSTRIAL ENGINEERS AND ARCHITECTS

420 Coristine Bldg., Montreal 509 Continental Life Bldg., Toronto

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Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

ILLUMINATED SIGNS
Geo. Booth & Son, Toronto.

INCUBATORS & BROODERS
Lee Mfg. Co., Ltd., Pembroke, Ont.

INJECTORS, automatic and autopositive
Penberthy Injector Co, Ltd., Windsor, Ont.

INSULATED WIRE
*Canadian General Electric Co., Ltd.. Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

INSULATION. patent seamless cork
*Canadian H. W. Johns-Manville Co., Toronto.
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS
Standard Clay Products, Ltd., St. Johns, Que.

IRON:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar
Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.
*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:
*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY
A. R. Whittall, Montreal.

JAM, canned goods, etc.
E. D. Smith & Son, Limited.

JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.

JOINTERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

JELLY POWDER
S. H. Ewing & Sons, Montreal. Que.

JEWELRY, enamelled souvenir
Caron Bros., Montreal, Que.

JEWELRY, gold filled
Caron Bros., Montreal, Que.

KELSEY WARM AIR GENERATOR
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:
*Sheldons. Ltd., Galt.

KINDLING
Standard Fuel Co., Toronto.

KNIFE GRINDERS:
*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:
*Penman's, Ltd., Paris, Ont.

KNIVES
*E. C. Atkins & Co., Hamilton.
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.

KRAFT, brown paper:
*The New Brunswick Pulp & Paper Mfg. Co., Ltd., Millerton, N.B.

LABELS
Lawson & Jones Ltd., London, Ont.

LABELS, lithographed
Harris Lithographing Co., Toronto.

LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
Sadler & Haworth, Montreal, Que.

LACE, leather:
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LAGER
E. L. Drewry, Winnipeg, Man.

LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:
Canadian Billings & Spencer Ltd., Welland.

LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.

LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD
* The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET
Toronto Plate Glass Importing Co., Ltd.. Toronto.

LEAD PIPE
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER
The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS
Lamontagne. Ltd., Montreal, Que.

LEATHER, hemlock sole
The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather
A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd.. Toronto.

LEATHER, upholstering.
Clarke & Clarke, Limited, Toronto.

LEATHER, upper
A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED TIN WARE:
*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Company, Ottawa, Ont.
Hough Lithographing Co., Ltd., Toronto.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited Toronto.
Rolph & Clark Ltd., Toronto.

LOCKERS:
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene. Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:
*Asbestos Mfg. Co., Ltd.. Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, decking and planking
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).

LUMBER, Douglas fir (Oregon pine)
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, long timbers and spars
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, pickets and lath
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, red pine and spruce
Gillies Bros., Ltd.. Braeside, Ont.

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, staves and heading
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, white pine
Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons. Ltd., Galt.

MACHINERY, conveying.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co.. Montreal.
The Northern Crane Works, Ltd., Walkerville.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

MACHINERY, elevating.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
*Wm. & J. G. Greey, Toronto.

MACHINERY, elevating and conveying:
*Wm. & J. G. Greey, Toronto.

MACHINERY, flour mill:
*The Goldie & McCullough Co., Ltd., Galt.
*Wm. & J. G. Greey, Toronto.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY GUARDS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MACHINERY, hoisting, etc.
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works. Ltd., Toronto.
J. & R. Weir Montreal. Que.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.
*M. Beatty & Sons, Ltd., Welland, Ont.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, pumping
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Waterous Engine Works Co., Ltd.. Brantford.

MACHINERY, sawmill
*Canada Machinery Corporation, Ltd., Galt, Ont.
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene, Ont.
W. P. Plant, Hastings. Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, special
Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery
W. P. Plant, Hastings. Ont.

MACHINERY, transmission
*Dodge Mfg. Co.. Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

MACHINERY, wood working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*Berlin Machine Works, Ltd., Hamilton.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:
*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting
Spramotor Co., London, Ont.

*For Display Advertisement See Index Page 545

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Canadian Carbonate Co., Ltd. Montreal, Que.

MAILING TUBES:
*Dominion Paper Box Co., Ltd., Toronto.

MALT:
*Hiram Walker & Sons, Ltd., Walkerville.

MANTELS, wood
W. A. Moore Co., Ltd., Meaford Ont.

MAPS AND MAP MOUNTING
The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MATCHES:
*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned
The Wm. Davies Co.. Ltd., Toronto.

MECHANICAL DRAUGHT
*Canadian Sirocco Co., Windsor, Ont.

MEDICINES, patented and pharmaceutical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
Alonzo W. Spooner, Limited, Port Hope, Ont.

METAL CEILING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*A. B. Ormsby, Ltd., Toronto.

METAL, spinning and stamping
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SASH:
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville.

METAL SHINGLES:
*Metal Shingle & Siding Co., Ltd., Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

METAL SIDING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*A. B. Ormsby, Ltd., Toronto.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS
Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)
Holt, Renfrew Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)
Holt. Renfrew, Ltd., Quebec, Que.

MONUMENTS
McIntosh Granite Co., Ltd., Toronto.

MORTISERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation. Galt.

MOTOR CAR PARTS AND ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.
*Russell Motor Car Co., Ltd., Toronto.

MOTOR-DRIVEN GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MOTORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd,. Hamilton.

MOTORS, D.C.
*Canadian Crocker Wheeler Co., St. Catharines, Ont.
*Northern Electric Co., Ltd., Montreal, Que.

MOTORS, electric (alternating current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd.. Toronto.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Gramm Motor Truck Co., Ltd.. Walkerville.

MOULDERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MOULDINGS. metal
*Kawneer Mfg. Co., Ltd., Guelph, Ont.

NAILS:
*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAME PLATES
Patterson and Heward, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NITROGEN
*L'Air Liquide Society, Montreal, Que.

NUTS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

OAKUM, plumbers', Canadian Navy
Factory Waste and Metal Co., Montreal, Que.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.
*Wm. & J. G. Greey, Toronto.

OFFICE STATIONERY:
*The Montreal Lithographing Co., Ltd., Montreal.

OILS
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS
S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES
Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring
S. F. Bowser & Co., Toronto.

OIL COMPANIES
Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)
*British American Oil Co., Ltd., Toronto.

OILS, Petroleum
*The Imperial Oil Co., Ltd.. Toronto.

OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

ORGANS
*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe
Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour
Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OSTRICH PLUMES
R. Parker & Co., Toronto.

OVENS, portable bake
Bedford Stove Co., Bedford. Que.
*Wm. & J. G. Greey, Toronto.

OVERALLS
Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS
Rosamond Woollen Co., Aimonte, Ont.

OVERHEAD RUNWAYS.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont

OXYGEN
*L'Air Liquide Society, Montreal, Que.

PACKING BOXES
Barchard & Co., Ltd., Toronto.

PACKING, engine:
Garlock Packing Co., Hamilton.

PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.

PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint and Varnish Co., Ltd., Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island, Que.

PAPER BOARDS
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, cover
Barber Paper & Coating Mills Ltd Georgetown, Ont.

PAPER, envelope
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building
Bathurst Lumber Co.. Ltd., Bathurst, N.B.
*The Riordon Pulp and Paper Co., Montreal. Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, carbon
*Peerless Carbon and Ribbon Mfg Co., Ltd., Toronto.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd.. Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd. Georgetown, Ont.

PAPER, coated box board
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, enamelled blotting
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, genuine Canadian kraft, glazed and unglazed
*The New Brunswick Pulp and Paper Co., Ltd., Millerton, N.B

PAPER, gummed tapes
Gummed Papers, Ltd., Brampton, Ont.

PAPER, label
Barber Paper & Coating Mills, Ltd.. Georgetown, Ont.

PAPER, ledger
*Rolland Paper Co., Ltd., Montreal. Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co.. Cornwall, Ont.

PAPER, wall
Stauntons, Ltd., Toronto.

PAPER, writing
The Toronto Paper Mfg Co.. Cornwall. Ont.

PAPER, writing, high-grade
*Rolland Paper Co., Ltd., Montreal. Que.

PAPER, writing, superfine
*Rolland Paper Co., Ltd., Montreal. Que.

PAPER BOXES:
*Dominion Paper Box Co., Toronto.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Limited. Stratford, Ont.

*For Display Advertisement See Index, Page 545



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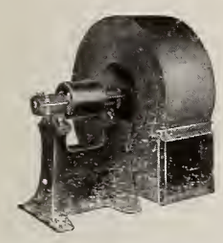
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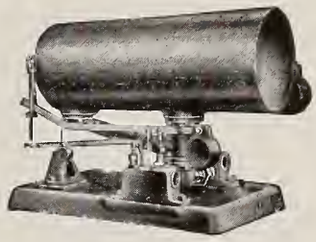
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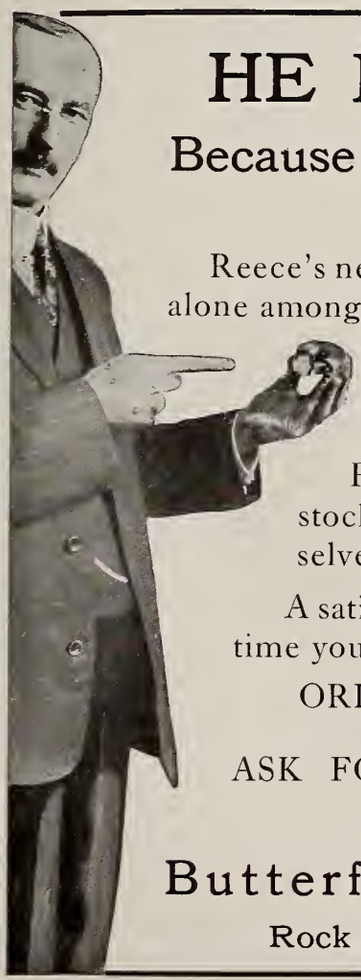
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PETROLEUM PRODUCTS
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Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.
*Gourlay, Winter and Leeming, Toronto.

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The Otto Higel Co., Ltd., Toronto.

PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

PIANOS, player
*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions
The Otto Higel Co., Ltd, Toronto.

PIANO STOOLS and BENCHES
*Goderich Organ Co., Goderich, Ont.

PICKLES
The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS
T. A. Lytle Co., Ltd., Toronto.

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*The Steel Co. of Canada, Ltd., Hamilton.

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Wilson Bros., Ltd., Collingwood, Ont.

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Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:
*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

PIPES, culvert
Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer
Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings
Warden King Ltd., Montreal, Que.

PIPES AND TUBES, wrought merchant
*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off Machines
John H. Hall & Sons, Limited, Brantford, Ont.

PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:
*Berlin Machine Works, Ltd. Hamilton.
*Canada Machinery Corporation Galt.

PLANING MILLS
G. & J. Esplen, Montreal, Que.

PLASTER, fireproofing
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER OF PARIS
*Albert Mfg. Co., Hillsborough, N.B.
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER, hard wall
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land
*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:
*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS
J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:
Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES
Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain
Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

POLISHING MACHINES
*The Ford-Smith Machine Co., Ltd., Hamilton.

PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence
Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS
Stone, Limited, Toronto.
Hough Lithographing Co., Ltd., Toronto.

POULTRY SUPPLIES AND MEDICINES
Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

POWER SWITCHBOARDS
*Northern Electric Co., Ltd., Montreal, Que.

PRESSES AND DIES
Brown Boggs Co., Ltd., Hamilton, Ont.

PRESSES, baling
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic
William R. Perrin & Co., Ltd., Toronto.
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer
William R. Perrin & Co., Ltd., Toronto.

PRESS POWER:
*Canada Machinery Corporation, Galt.

PRINTERS
Rous & Mann, Ltd., Toronto.
R. G. McLean, Toronto.

PRINTERS, catalogue:
R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.

PRODUCE
The Wm. Davies Co., Ltd., Toronto.

PROPRIETARY MEDICINES
Northrop & Lyman Co., Ltd., Toronto.

PROVISIONS
The Wm. Davies Co., Ltd., Toronto.

PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

PULP, Bleached Sulphite
The Edward Partington Pulp and Paper Co., St. John, N.B.

PULP, Sulphide
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PUMPS.
*Canadian Allis-Chalmers, Limited, Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
Spramotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

PUMPS, ammonia
*Bawden Machine Co., Ltd., Toronto.

PUMPS, boiler feed.
*Bawden Machine Co., Ltd., Toronto.
*Canadian Allis-Chalmers, Limited, Toronto.
*The Goldie & McCullough Co., Ltd., Galt.

PUMPS, centrifugal
*M. Beatty & Sons, Ltd., Welland, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, iron
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, tar
*Bawden Machine Co., Ltd., Toronto.

PUMPS, turbine, and equipment
*Bawden Machine Co., Ltd., Toronto.

PUMPS (Turbine and reciprocating)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

PUMPS, turbines
*Canadian Allis-Chalmers, Ltd., Toronto.

PYJAMAS AND NIGHT ROBES
Williams, Greene & Rome, Berlin, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King. Ltd., Montreal, Que.

RAILINGS, brass and iron:
*Dennis Wire & Iron Works Co., London.

RAILINGS, bronze
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada. Ltd., Montreal, Que.

RAILWAY SUPPLIES.
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

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The Esdale Press Ltd., Ottawa Ont

READY-TO-WEAR GARMENTS, Ladies'
H. C. Boulter Co., Ltd., Toronto.

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Pratt and Whitney Co. of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.
*Butterfield & Co., Rock Island, P.Q.

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REED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock, Ont.

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Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

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The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions.
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT for concrete:
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETS:
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

RIVETS, bifurcated and tubular
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ROLLERS, shade
Daly & Morin, Montreal, Que.

ROOFING, metal
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.

ROOFING, ready to lay
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
Dominion Bridge Co., Ltd., Montreal.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.
The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.

RUBBER GOODS.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto.

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

RYE
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SAMPLE CASES
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.

SANDERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SANDPAPER
Delany and Pettit, Ltd., Toronto, Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
Canadian Salt Co., Ltd., Windsor Ont.

SANITARY PAPER TOWELS:
*E. B. Eddy Co., Ltd., Hull.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt, Ont.

SAWS, band:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

*For Display Advertisement See Index, Page 545

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SAW ..., crosscut:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SAWS, crosscut and band
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack:
*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

SAWS, specialties
*Victor Saw Works, Ltd., Hamilton, Ont.

SCALES
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, for weighing
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCREENS:
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.
*Wm. & J. G. Greey, Toronto.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREWS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SHAFTING.
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

SHANTY BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SHEAR BLADES, iron
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING, asbestos corrugated:
*Asbestos Mfg. Co., Ltd., Montreal.
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHEET METAL WARE (iron galvanized and enamelled)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.

SHELLAC
*Berry Bros., Ltd., Winnipeg.

SHINGLES, asbestos cement:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHIRTS
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
Peerless Overall Co., Rock Island, Que.
John W. Peck & Co., Ltd., Montreal, Que.
The Standard Shirt Co., Ltd., Montreal, Que.

SHIRTS, workmen's
A. R. Clarke & Co., Ltd., Toronto.

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOES, running and athletic
Ames-Holden-McCready, Ltd., Montreal, Que.

SHOOKS
Barchard & Co., Ltd., Montreal, Que.

SHOVELS, steam
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

SIGNS
Geo. Booth & Son, Toronto.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

SILVERWARE
Toronto Silver Plate Co., Ltd., Toronto.
Standard Silver Co., Toronto.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto.

SINKS, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKATES, figure
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, genuine Acme
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, hockey
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, ice
Canada Cycle & Motor Co., Ltd., Toronto.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS:
*Metallic Roofing Co., Ltd., Toronto.

SLEIGHS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

SLIPPERS
Ames-Holden-McCready, Ltd., Montreal, Que.

SOAPS
J. Barsalou & Co., Ltd., Montreal, Que.

SOAP (soft, oil)
The Imperial Varnish & Color Co., Ltd., Toronto.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*The Canada Metal Co., Toronto.

SOLDER, wire and bar
*American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPARK PLUGS
Canadian Carbon Co., Ltd., Toronto.

SPECIAL MACHINERY
*The Ford-Smith Machine Co., Ltd., Hamilton.

SPIRAL CONVEYORS.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

SPLIT PEAS
H. Murton, Guelph, Ont.

SPIKES, railway and marine
Starr Mfg. Co., Ltd., Dartmouth, N.S.

SPIRITS
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto.

SPRAYERS
Spramotor Co., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal, Que.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriages and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*General Fire Equipment Co., Ltd., Toronto.
*Purdy, Mansell, Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

STAINS
R. C. Jamieson & Co., Ltd., Montreal, Que.

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMP MILLS:
*Jenckes Machine Co., Sherbrooke.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM HAMMERS:
*Canada Machinery Corporation, Galt.

STEAM PIPE and BOILER COVERINGS, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*M. Beatty & Sons, Ltd., Welland, Ont.

STEAM SPECIALTIES:
*Sheldons, Ltd., Galt.

STEAM TRAPS
*Canadian Sirocco Co., Windsor, Ont.

STEEL:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.

STEEL CASTINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

STEEL PEN STOCKS:
*Jenckes Machine Co., Sherbrooke.

STEEL RODS:
*The Steel Co. of Canada, Ltd., Hamilton.

STEEL SASH:
*Dennis Wire & Iron Works, Co., London.
*Henry Hope & Sons, Ltd., Toronto.

STEEL SECTIONS
*Kawneer Mfg. Co., Ltd., Guelph, Ont.

STEEL SHELVING:
*Dennis Wire & Iron Works, Co., London.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING
Central Press Agency, Toronto.

STOOLS AND BENCHES, piano and organ
*Otterville Mfg. Co., Ltd., Otterville, Ont.

STONE
The Corinthian Stone Co., Guelph, Ont.
The Hagersville Contracting Co., Hagersville, Ont.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES
Tudhope-Anderson Co., Ltd., Orillia, Ont.
Bedford Stove Co., Bedford, Que.

STOVE BOARDS
Sheet Metal Products Co. of Canada, Ltd., Toronto.

STOVE LININGS
Standard Clay Products, Ltd., St. Johns, Que.

STOVES AND RANGES
Bedford Stove Co., Bedford, Que.
Gurney Foundry Co., Ltd., Toronto.
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont.

STRETCHERS, lace curtain
*Otterville Mfg. Co., Ltd., Otter-

STRUCTURAL STEEL
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*National Bridge Company of Canada, Ltd., Montreal, Que.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

SURFACERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SWING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

SWITCHBOARDS
*Canadian General Electric Co., Ltd., Toronto.
*The Canadian Independent Telephone Co., Ltd., Toronto.
*The Northern Electric & Mfg. Co., Ltd., Montreal.

SWITCHES, railway
Canadian Ramapo Iron Works, Ltd. Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS
*Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SYSTEMS, OFFICE
*Autographic Register Co., of Canada, Montreal.

TABLES, billiard
Samuel May & Co., Toronto.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton Ont.

TANKS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*E. Leonard & Sons, London, Ont.
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*International Engineering Works, Ltd, Amherst, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.

TAPS
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

TAP WRENCHES
*Butterfield & Co., Rock Island, P.Q

TAPES, measuring
The Lufkin Rule Co., of Canada Ltd., Windsor, Ont.

TAPES, paper and cloth, gummed and ungummed
Gummed Papers, Ltd., Brampton, Ont.

TELEPHONE ACCESSORIES
Canadian Independent Telephone Co., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

TELEPHONE APPARATUS
*The Canadian Independent Telephone Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

*For Display Advertisement See Index, Page 545



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*Dominion Textile Co., Ltd., Montreal, Que.

THEATRE CURTAINS, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.

THUMB SCREWS:
*Canadian Billings & Spencer, Ltd., Welland.

TILING, interlocking rubber.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TIMBER:
*The B.C. Mills Timber & Trading Co., Vancouver, B.C.
James Sheppard & Son, Sorel, Que.

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*International Time Recording Co., Toronto.
*W. A. Wood, Montreal.

TANNERS' SUPPLIES
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Sheet Metal Products Co. of Canada, Ltd., Toronto.

TIRES, cycle, auto and truck.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Goodyear Tire & Rubber Co., of Canada, Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TOOL GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

TRADE MARKS AND DESIGNS
Ridout & Maybee, Toronto.

TRANSFORMERS
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.

TRANSFORMERS, power
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TOOLS, sheet metal workers
Brown Boggs Co., Ltd., Hamilton, Ont.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton, Ont.

TRANSMISSION MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

TROLLEYS.
The Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont.

TRUCKS
The Gurney Scale Co., Hamilton, Ont.
*Wm. & J. G. Greey, Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford.

TRUNKS
Lamontagne Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal, Que.
The M. Langmuir Mfg. Co. of Toronto. Ltd., Toronto.

TUBING, Brass and Copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Canadian Seamless Wire Co., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

Tubing, cold rolled welded
*Kawneer Mfg. Co., Ltd., Guelph, Ont.

TUBING, Gold and Silver
Canadian Seamless Wire Co., Toronto.

TURBINES, water.
*Canadian Allis-Chalmers, Limited, Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*International Engineering Works, Ltd., Amherst. N.S.

TURBINES, steam:
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
*International Engineering Works, Ltd., Amherst. N.S.

TURBINE AND RECIPROCATING PUMPS.
*The Bawden Machine Co., Limited, Toronto.

TWEEDS
Rosamond Woollen Co., Almonte, Ont.

TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
Pratt and Whitney Co., of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

TYPEWRITERS:
*United Typewriter Co., Toronto.

TYPEWRITER RIBBONS
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial
Kingston Hosiery Co., Ltd., Kingston. Ont.

UNIONS
*Dart Union Co., Ltd., Toronto, Ont.
*Otterville Mfg. Co., Ltd., Otterville, Ont.

UNDERWEAR TRIMMINGS
The Whitby Braid & Edging Co., Woodstock, Ont.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

VACUUM PUMPS
*The Bawden Machine Co., Limited, Toronto.

VALVES:
*Kerr Engine Co., Ltd., Walkerville.

VALVES, for steam and water
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
Jenkins Bros., Ltd., Montreal, Que.

VALVES, regrinding globe, angle cross checks, swing checks, etc.
Penberthy Injector Co., Ltd., Windsor, Ont.

VARNISHES
*Ault & Wiborg Co. of Canada, Ltd. Toronto.
Berry Bros., Walkerville, Ont.
*Dougall Varnish Co., Ltd., Monreal.
R. C. Jamieson & Co., Ltd., Montreal. Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal.

VAULTS and VAULT DOORS:
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Goldie & McCullough Co., Ltd., Galt.

VENTILATING APPLIANCES:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

VENTILATING SYSTEMS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
Gurney Foundry Co., Ltd., Toronto.

VENTILATION SYSTEMS, electric
*Northern Electric Co., Ltd., Montreal, Que.

VENTILATORS:
*A. B. Ormsby, Ltd., Toronto.
*John T. Wilson & Co., Toronto.
*Geo. W. Reed & Co., Montreal.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

VINEGAR
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

VISES:
*National Machinery & Supply Co., Ltd., Hamilton.

WAGONS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

WALL COPING
Standard Clay Products, Ltd., St. Johns, Que.

WALL PLASTER
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

WASHERS:
*The Steel Co. of Canada, Ltd., Hamilton.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTES, wool and cotton
Factory Waste and Metal Co., Montreal, Que.

WATER-PROOF CEMENT COATING
Benjamin Moore & Co., Ltd., Toronto.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont.

WHEELS
*Canadian Car & Foundry Co., Ltd. Montreal, Que.

WHEELS, corundum
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, propeller, iron and steel
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, turbine, water.
*Canadian Allis-Chalmers, Limited, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, water (impulse type)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WELDING PLANTS (autogenous)
*L'Air Liquide Society, Montreal, Que.

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*Hiram Walker & Sons, Ltd., Walkerville, Ont.

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Coniagas Reduction Co., Ltd., St. Catharines, Ont.

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*Berry Bros., Ltd., Winnipeg.

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*Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.

WINDOW SHADES
Daly & Morin, Montreal, Que.

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*Canada Wire & Iron Goods Co., Hamilton.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Northern Electric Co., Ltd., Montreal, Quebec.
The Graham Nail Works, Toronto.

WIRE CLOTH
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRED GLASS:
*Metallic Roofing Co., Ltd., Toronto.
*A. B. Ormsby, Ltd., Toronto.

WIRE GUARDS
C. H. Johnson & Sons, Ltd., Montreal, Que.

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*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

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WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

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La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SPLIT PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

WOOL
H. V. Andrews, Toronto.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

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*The Thompson & Norris Co., of Canada, Ltd., Niagara Falls, Ont.

WROUGHT PIPE:
*The Steel Co. of Canada, Ltd., Hamilton.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical
*The Canada Metal Co., Toronto.

*For Display Advertisement See Index Page 545

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Executive Offices: Nos. 346 and 348 BROADWAY, N.Y. CITY, U.S.A.

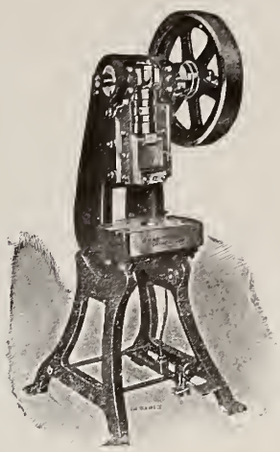
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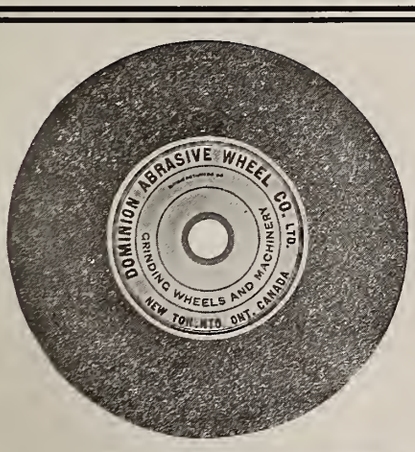
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CERTAINLY, but think for a moment what this means. It means that the great objection to steel construction is removed; that the alarming and dangerous condition of some of the early built structures need not be repeated; and that architects and builders when they specify or use steel construction coated with Bitunamel have a material that experience has proved to be absolutely impervious to rust.



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EVERY TRAVELLER SHOULD CARRY HIS FUNDS IN DOMINION EXPRESS TRAVELLERS CHEQUES

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Not only do these cheques guarantee you against loss, but they show you the exact amount you will receive in foreign money in the various countries, which is a very important matter to a stranger in a foreign land.

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If the Cheques are Lost, Stolen or Destroyed we Refund Your Money. The Security Alone is Worth More to You Than the Cost of the Cheques, viz., 50 Cents per $100.

For further particulars apply to any office of the

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The Boiler Inspection and Insurance Co. of Canada

Continental Life Building, Toronto

Issues Policies of Insurance after A CAREFUL INSPECTION OF THE BOILERS Covering LOSS OR DAMAGE TO PROPERTY and LOSS RESULTING FROM LOSS OF LIFE AND PERSONAL INJURIES. :: :: :: ::

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Don't wear out your motor by using the wrong oil.

Polarine assures freedom from breakdowns and easy motoring under all conditions of load and temperature.

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TORONTO WINNIPEG MONTREAL ST. JOHN HALIFAX

Vol. XV., No. 7 FEBRUARY, 1915 $2.00 per Year

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AS surely as men realise that they need better service in the handling of their advertising, so much is the conviction forced upon them that they'll have to go to "Gibbons" to get it.

Our plans and copy do not always jibe with a new client's ideas as to how *he* would do it—but it is a noticeable fact that with almost every long service account in the house, we have, within reason, "carte blanche" when it comes to advertising.

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Code—A.B.C. 5th Edition

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WE are now manufacturing these lines for a number of Canadian firms filling war contracts. We are the Pioneers and the largest manufacturers of all steel saddle tree arches in Canada. :: ::

THE DOMINION STAMPING COMPANY
LIMITED
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"No good man did, or ever should encourage cheapness at the ruinous expense of *unfitness*, which is always infidelity, and is dishonorable to a man. If I want an article let it be genuine, at whatever price; if the price is too high for me, I will go without it, unequipped with it for the present,—I shall not have equipped myself with hypocrisy at any rate. This, if you will reflect, is primarily the rule of all purchasing and producing men."—*Thomas Carlyle.*

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GASOLENE	BENZINE	LAMP OILS
FUEL OIL	GAS OIL	PARAFFINE WAX
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LUBRICATING OILS FOR STEAM, MOTOR AND ELECTRIC PLANTS

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Montreal, Ottawa, London

HEAD OFFICE
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WE MAKE **THAT GOOD OIL!**

DART UNION PIPE COUPLINGS

YOU GET

EFFICIENCY
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ECONOMY
SATISFACTION

DO NOT LEAK

Dart Union Co., Limited
TORONTO, ONT.

Made in Canada of Canadian Material and Sold by Canadian Jobbers

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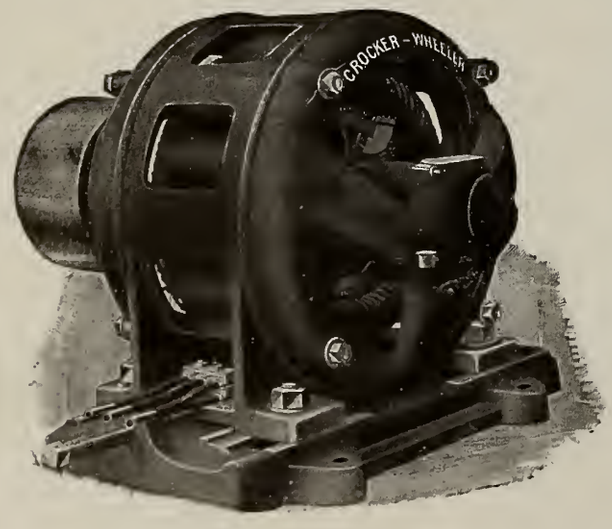
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FOR BUYERS' GUIDE, SEE PAGE 762



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CROCKER-WHEELER INDUCTION MOTORS

INCLUDES:

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Large Journals

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Excellent Efficiency

They have many other desirable features; Bulletin 155 describes them.

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1,735,685 Canadians

Purchase millions of dollars worth of necessities every year—and you can reach that number every day in the year through an advertisement in the Street Cars of Canada. It will cost you only one dollar for every 48,000 you reach and an average of one cent from each of them would give you $480.00 worth of business every day in the year.

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Write us to-day, as the space is limited and only a very few can get in during 1915.

Any of our offices will give you prompt attention.

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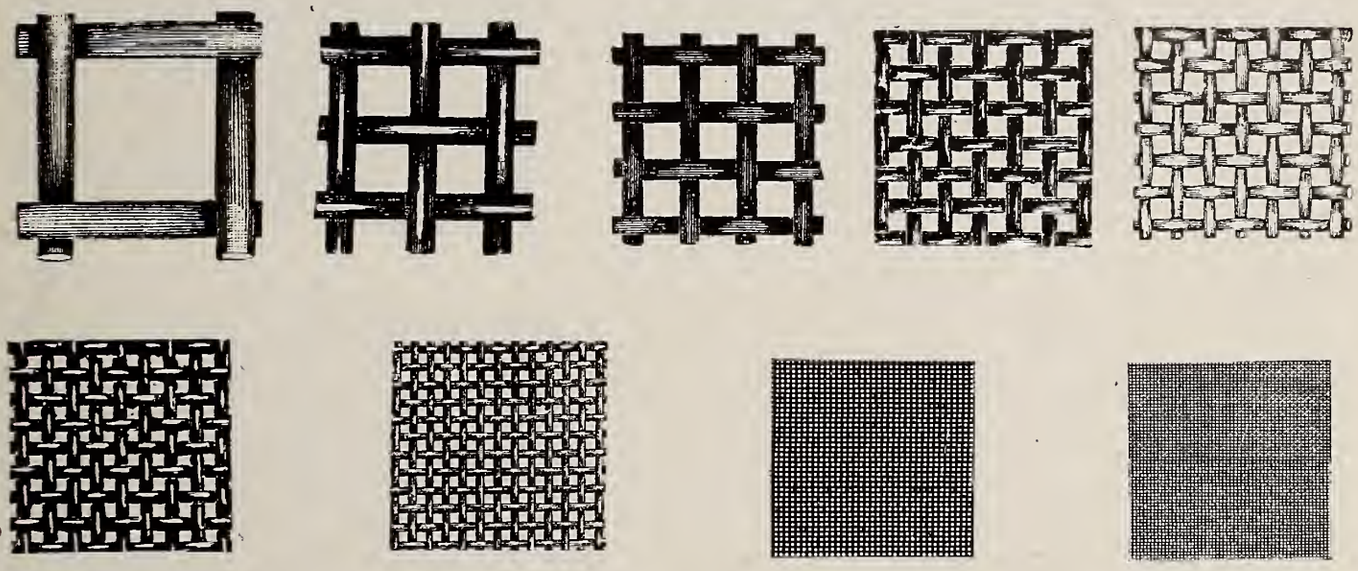
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COMPLETE style and size assortments in NAMCO Screws and Nuts make it possible to ship your order the day it is received.
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MONTREAL P.Q.
IN ST. HENRI AT G.T.R.

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All meshes—light and heavy grades.

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is at your service, too.



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If you want them filled satisfactorily.

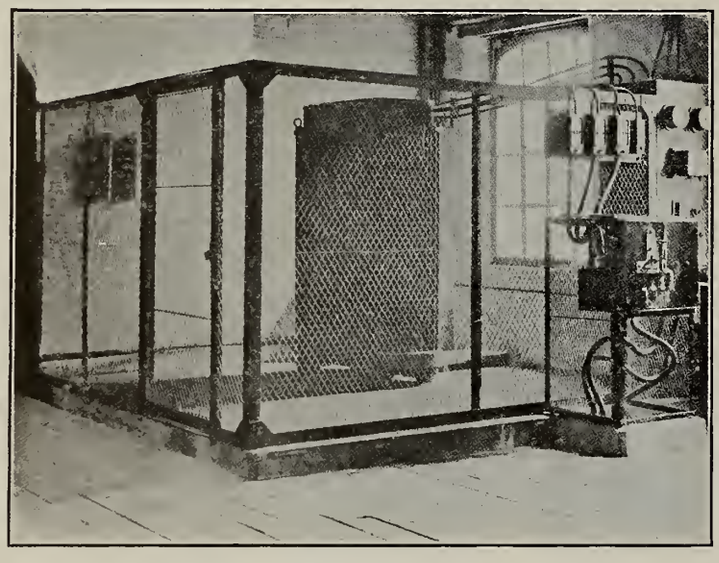
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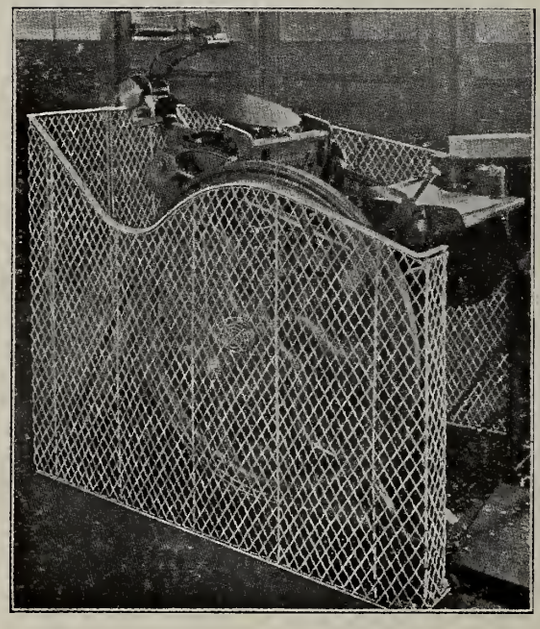
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Every Accident Prevented Means Smaller Assessment for Workman's Compensation

PREVENT BY PROTECTION

Here are Some Ways—





ADVANTAGES OF WIRE GUARD PROTECTION

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2. They insure excellent ventilation.
3. They are easily placed on machines.
4. They are cheap.
5. They protect.

We will be glad to go into the question of Safety Devices.
Our experience of years is at your service.

THE GEO. B. MEADOWS Toronto Wire, Iron & Brass Works Co., Limited

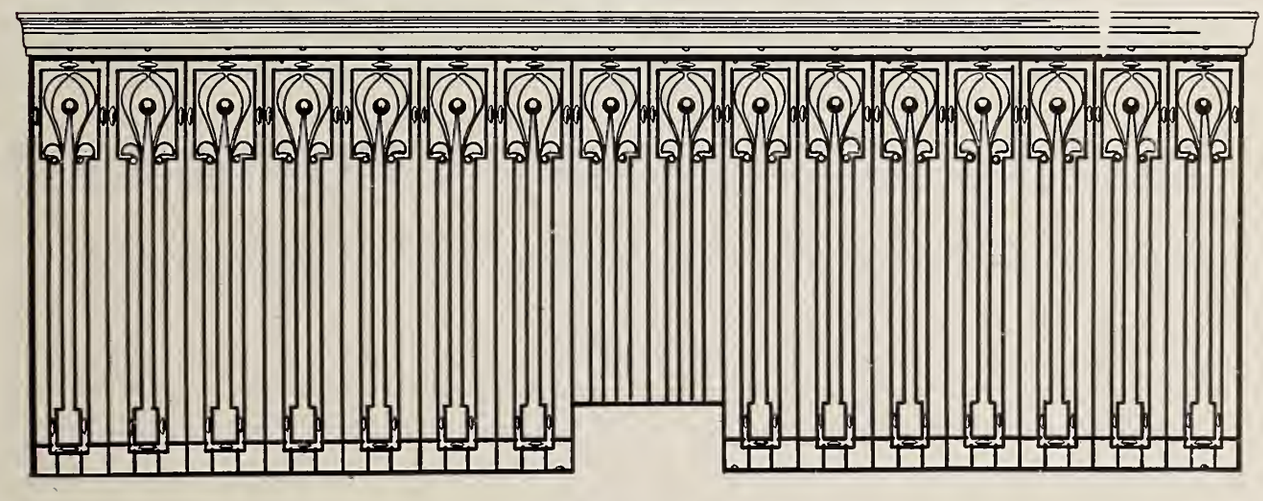
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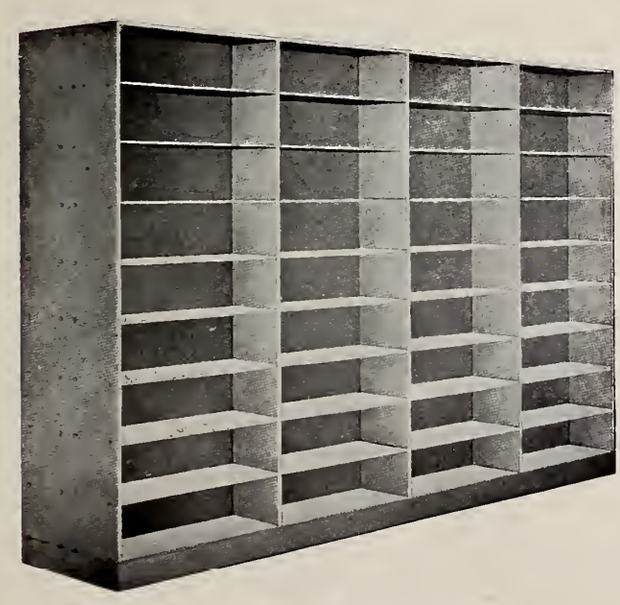
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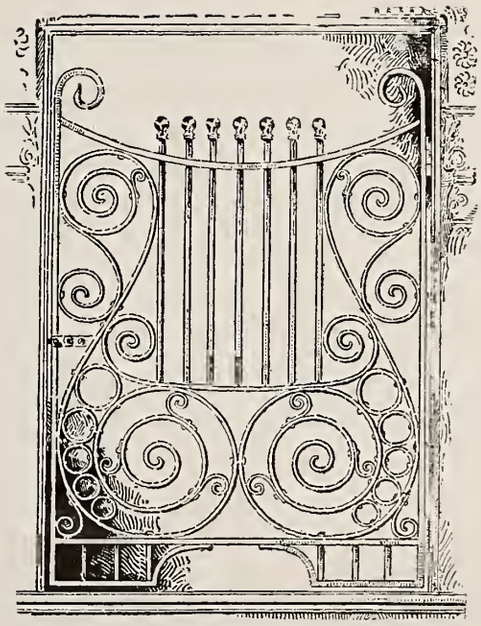
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LETTER TRAYS
TRANSFER CASES
STEEL VAULT SHELVING

These are some furnishings you can get from us.



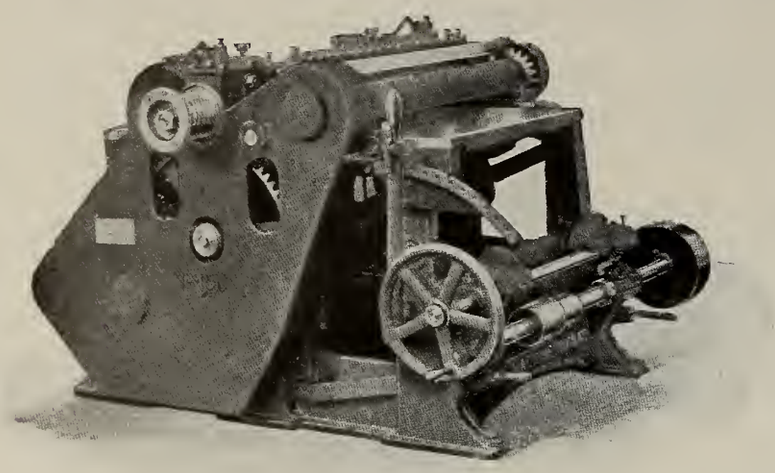




THE GEO. B. MEADOWS Toronto Wire, Iron & Brass Works Co., Limited

MEADOWS BLOCK, WEST WELLINGTON ST., TORONTO, CANADA

Look out for next month's advertisement.



Berlin Surfacers

WE have specialized in planing machines for years. Berlin surfacers represent the experience of all these years. You can make no mistake by putting your surfacing requirements up to us. We build surfacers for every purpose. Whatever surfacing you want to do may be done at lowest cost on Berlin.

Are Your Cabinet Surfacers Losing Money For You at the Sander?

Are you thinking of replacing or adding to your present surfacing equipment? Then judge the earning-power of Berlin Surfacers by comparing them with others. Mail your card request for complete data now — so you'll have it for reference when you want it.

DON'T depend on your sander to correct the inferior work of your surfacers. That isn't profitable. The inefficiency of one machine is handicapping the other.

Surface your stock on the Berlin "156" Single Cabinet Surfacer. Then once through at the sander will suffice. And instead of sanding two pieces at one time the uniformity of the surfacing will enable your sander operator to feed stock across the entire width of the machine. Its efficiency is increased 100 per cent. That assures profit, absolutely.

Equipped with round heads carrying thin steel knives, which may be ground and jointed on the machine the "156" produces a finish that shines. Sanding all your stock won't be necessary.

The sturdy construction and the use of only proven design features assures low upkeep cost. There'll be fewer necessary shut downs, less lost time. The top infeed roll and chip-breaker may be sectional. The wedge method of bed adjustment assures its stability. Fine finish is therefore assured always.

BERLIN MACHINE WORKS, Limited, Hamilton, Ont.

Largest Manufacturers of Woodworking Machinery in the World

UNITED STATES PLANT BELOIT, WISCONSIN

"CLIMAX" ESTABLISHED 1876 "AMPHIBIA"
Leather, likegold, has no substitute

BELTING

This is a war year and not one dollar's worth of belting should be imported.

Keep Canadian money at home and Canadian workmen employed by buying

"MADE-IN-CANADA" BELTING

We have been Tanning and Manufacturing Belting

**IN CANADA
FOR 38 YEARS**

There is no better belting made anywhere than our

CLIMAX OAK TANNED
OR OUR
"AMPHIBIA" WATEPRROOF

Saddler & Haworth
ESTABLISHED · 1876
Tanners and Manufacturers

MONTREAL—511 William St.
ST. JOHN, N.B.—149 Prince William St.
TORONTO—38 Wellington St. East,
WINNIPEG — Princess and Bannatyne Sts.
VANCOUVER, B.C.—217 Columbia Ave.



Cut of 50-inch "Extra" Double Belt
Made by The J. C. McLaren Belting Co., Limited.

WE ARE HEADQUARTERS FOR ALL KINDS OF

BELTING
LACE LEATHER
CARD CLOTHING
REEDS AND
GENERAL
MILL SUPPLIES

ABSOLUTE SATISFACTION GUARANTEED

The J. C. McLaren Belting Co., Limited

ESTABLISHED 1856
Head Office and Factory
MONTREAL, Que.

Branches:
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80 LOMBARD ST., WINNIPEG

LEATHER BELTING

MADE IN CANADA

J. L. Goodhue & Company

LIMITED
DANVILLE - - QUEBEC

MANUFACTURERS OF

SUPERIOR QUALITY LEATHER
BELTING AND LACE LEATHER

Quality NOT PRICE OUR AIM

Canadian Manufacturers
SHOULD USE Canadian Belting

Made in Canada



From British Stock

"GENUINE OAK"
LEATHER BELTING

"D.K."
BALATA BELTING

Guaranteed to Give Satisfaction

D. K. McLAREN LIMITED

TORONTO MONTREAL ST. JOHN, N.B.
847 Beatty Street, VANCOUVER
Engineer's Supply Co., 123 Bannatyne Ave. E., WINNIPEG

Saves Time



And tools and therefore money. For outside workmen, repairmen, it's ideal. Provides each with an independent, secure, convenient place to keep overalls, kit and parts. Compartments 24" wide, 18" deep, 15" high. Made of sheet steel on angle steel frames. Doors expanded metal. Yale locks. Enamel finish. As cheap as wood and infinitely better.

THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON
CANADA

TANKS AND TOWERS

For Municipal, Railroad and Suburban water supply and

FACTORY SPRINKLER SYSTEMS

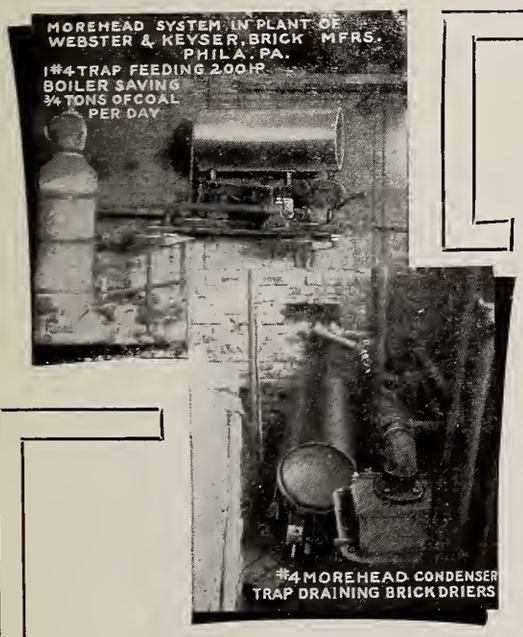
Send for special Tank and Tower catalogue.



GALVANIZING
Hot and Electro

Our galvanizing plant at our Toronto factory is one of the largest in Canada and is at your service at reasonable prices. Phone or write us for quotations on your galvanizing work.

Ontario Wind Engine & Pump Co., Ltd.
Toronto, Montreal, Winnipeg, Calgary



The Morehead System is being used everywhere on Heating, Drying and Cooking propositions of every kind from straight pipe work to fan stacks and under vacuum conditions without regard to the difference in pressures between the apparatus drained and that carried on the boiler and without regard to the location of the apparatus drained, whether above or below water line in the boiler.

Every day they save ¾ of a ton of coal in this plant because---

they feed their boilers with the *pure, hot* condensation that is drained from the steam apparatus and returned *directly* to the boilers again by the

MADE IN CANADA — *Morehead* **Back to Boiler SYSTEM** — MADE IN CANADA

¾ of a ton of coal per day amounts to a lot of money in a year—and all saved through a "Morehead" installation. Was it worth while? Then how about *your* plant? There's a "Morehead System" ready to *save* for you, too.

Write our Engineers and have them show you how a similar saving can be effected in your particular instance. Do it now while the matter is fresh in your mind.

Canadian Morehead Mfg. Co.
Dept. "K" Limited Woodstock, Ont.

265

Tool Room Partitions



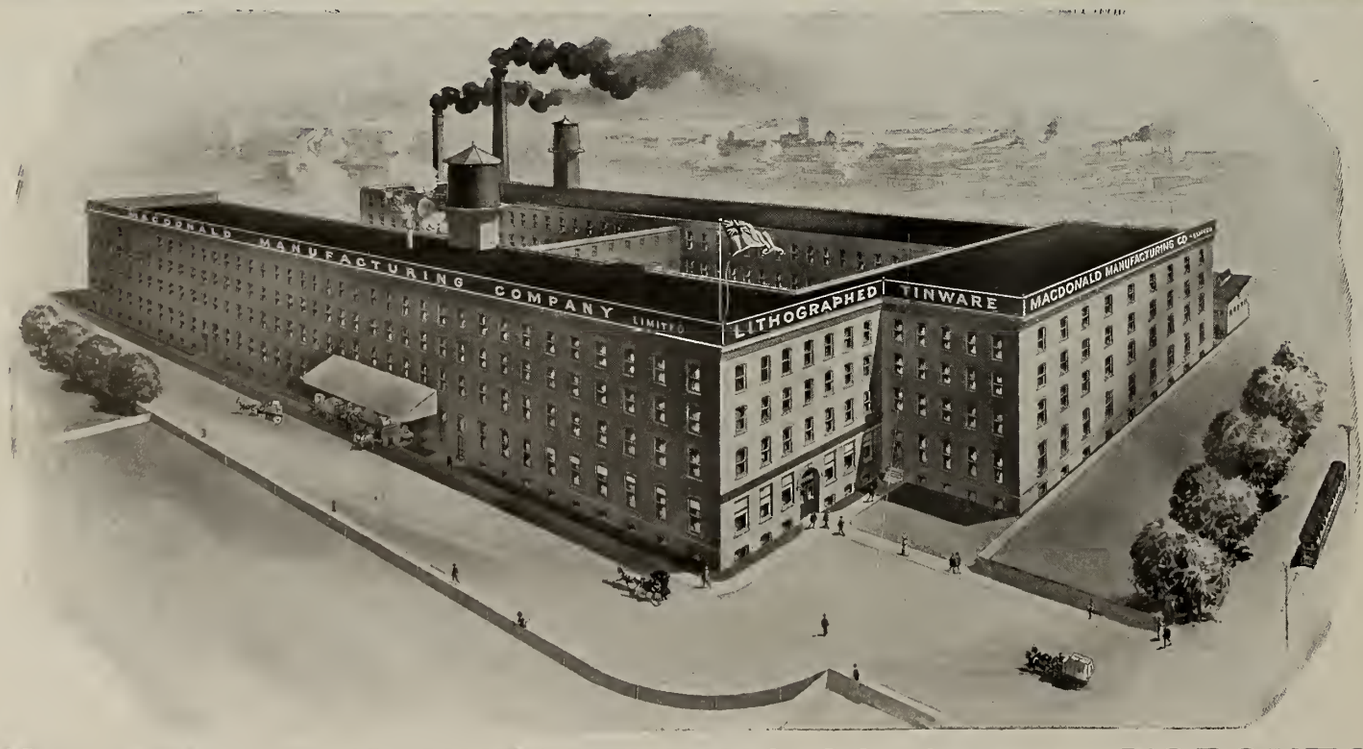
Machinery Guards
Window Guards
and
Wire Work of
every description

WIRE ROPE
ROPE FITTINGS

Manufactured by

THE B. GREENING WIRE CO., LIMITED

HAMILTON, ONT. MONTREAL, QUE.



MACDONALD MANUFACTURING CO., LIMITED, TORONTO

We Specialize on Cans or Boxes required for Customer's Exclusive Use
Practically Nothing Else made in our Entire Plant
This Ensures Undivided Attention to your Particular Order

PLAIN OR DECORATED TIN BOXES AND SIGNS

The *Factory*:



THIS illustration will serve to give you some idea of the extent of the home plant of The PEDLAR PEOPLE, Limited, at OSHAWA, Ontario, Established 1861. This extensive plant, which is equipped with the most modern machinery, facilitates the prompt execution of any special contracts, no matter how large. Every order. whether large or small, receives the same painstaking care and conscientious attention to detail.

The *Products*:

Sheet Metal Specialties—
Air Ducts and Piping. Ventilating Systems. Exhaust Systems. Tanks.

Culverts and Flumes—
Railroad and Municipal Culverts. Water Mains and Ducts for Irrigation Work, Mining Projects, Spillways, etc.

Metal Buildings in Structural Steel—
Cement Storehouses. Toolhouses. Watchman's Shelters. Incinerator Buildings. Hunting Lodges. Boathouses. Garages.

Fireproofing Materials—
Metal Lath, Furrings, Studding, Channels and All Metal Lumber.

Ferro Dovetail Plates (Curved and Straight)—
For Fire-Proof — Acid-Proof — Time-Proof — Roofing and Flooring.

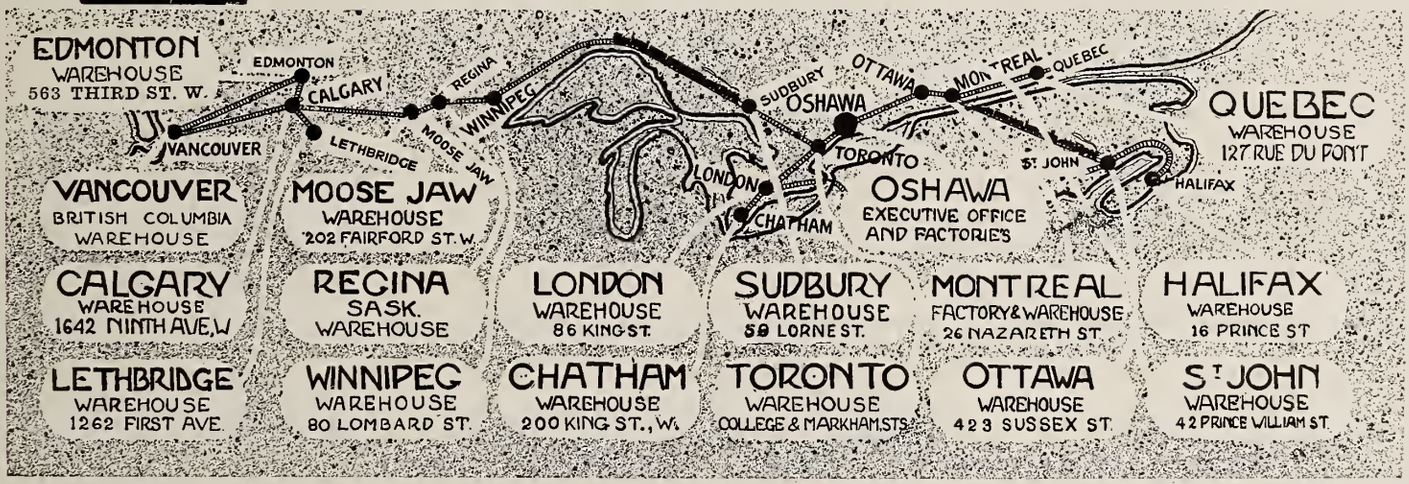
Fire Doors—
Pedlar's "Saino" Fire Doors, made in all styles. Rated "A1" by Underwriters' Laboratories.

Re-Enforcements—
Clinton Fabric. Expanded Metal in various designs and sizes of sheet.

Skylights and Ventilators—
Various styles.

Metal Shingles, Metal Roofing, Siding and **Ceilings — Eaves Trough, Conductor Pipe, Cornices, Ornamental Zinc Work**—and everything in Sheet Metal.

The *Service*:



With a chain of well stocked branches, conveniently located at the most essential points from Halifax to Vancouver, and covering Canada like a blanket, we are in a position to supply you promptly and economically

PEDLAR'S PERFECT PRODUCTS ARE MADE IN CANADA

If you are really serious in your intention to keep your money in Canada—to buy only "Made in Canada" goods—you will keep this advertisement where you can find it when you want Sheet Metal Products. Address Branch nearest you.

The PEDLAR PEOPLE Limited

Executive Office and Factories
OSHAWA, CANADA

Accurate Thread Cutting

A screw plate that is adjustable will appeal to your workmen. It makes for speed and accuracy. Reece's Screw Plate is adjustable—but it has in addition all the advantages of a solid die.

ORDER A SAMPLE TO-DAY

BUTTERFIELD & CO., INC.

ROCK ISLAND, P.Q. DERBY LINE, VT.



DROP FORGINGS

OF ALL KINDS

Canadian Billings & Spencer

Limited

Welland, Ontario

Cable Address "Therson" Toronto *Telephone Main 2863*

THOMSON, TILLEY & JOHNSTON

BARRISTERS, SOLICITORS, etc.

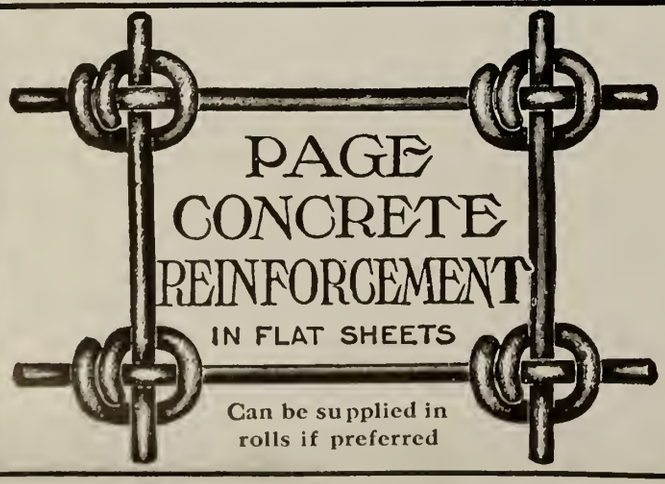
D. E. THOMSON, K.C. · STRACHAN JOHNSTON · W. N. TILLEY

ARTHUR J. THOMSON · R. H. PARMENTER

SOLICITORS FOR THE CANADIAN MANUFACTURERS' ASSOCIATION

Offices—Toronto General Trusts Building
59 Yonge Street

TORONTO
Canada



For Concrete Road Pavement, Walks, Building Floors, Etc.

We are the *originators* of this wire reinforcement in flat sheets, and it is coming into universal use wherever introduced. We have supplied many carloads of it this past season.

The standard mesh for road pavement is 6 x 12 inches; for bridges and building floors, the standard is 3 x 6 inches. Also, other meshes as desired. All sheets 4 feet wide, and any length specified that can be loaded in cars.

Samples will be sent upon request

We also supply Iron Fences, Fire Escapes, Office Wire Work, and all kinds of Builders' Wire and Iron Work.

The Page Wire Fence Co., Limited

Dept. 20a

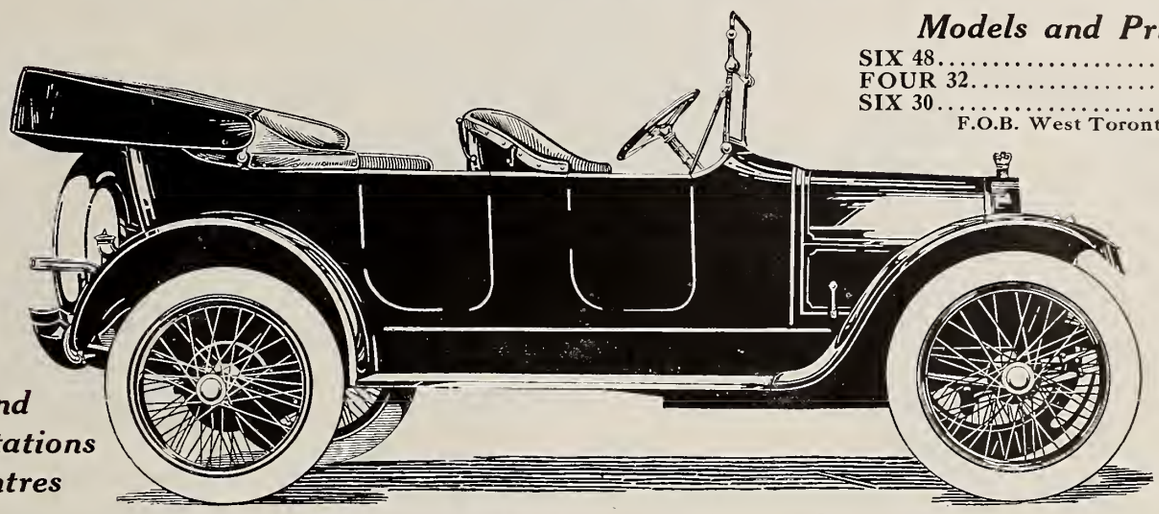
1137 King St. W. TORONTO · 505 Notre Dame St. W. MONTREAL · 87 Church St. WALKERVILLE · 39 Dock St. ST. JOHN, N.B.

RUSSELL CARS

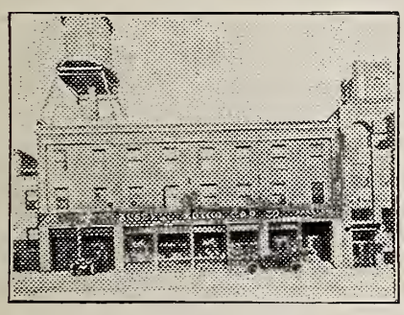
ARE MANUFACTURED IN CANADA

Models and Prices

SIX 48..... $4500
FOUR 32..... $2650
SIX 30..... $1750
F.O.B. West Toronto



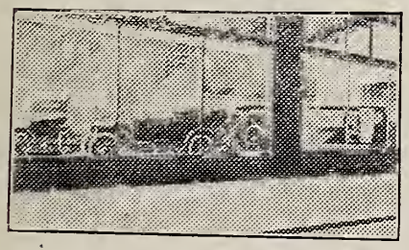
Agency and Service Stations in All Centres



Toronto Branch and Service Station, 100 Richmond St. W.



Hamilton Branch and Service Station, 26 Charles St.



Montreal Branch and Service Station, 5 Park Ave.

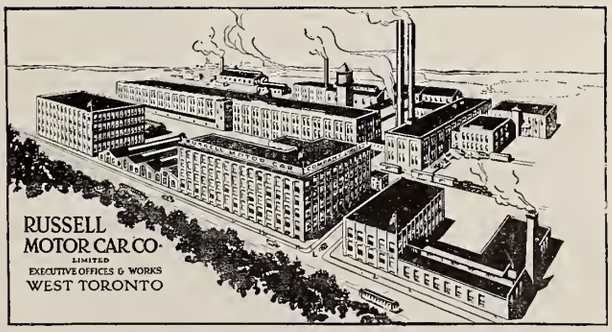
Russell Cars are manufactured in Canada. They are made complete in the Russell Shops at West Toronto.

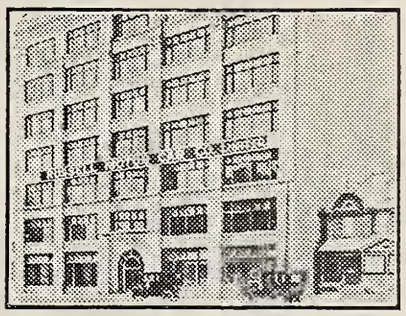
You can secure better quality in Canadian-made Cars.

You should prefer a Canadian Product.

You should investigate the Russell — manufactured in Canada — because you will find the Russell gives greater dollar for dollar value than any other car.

A permanent service system covers Canada. A completely equipped Factory, six fully equipped Factory Branches, and innumerable Service Stations insure maximum service in any part of the Dominion.

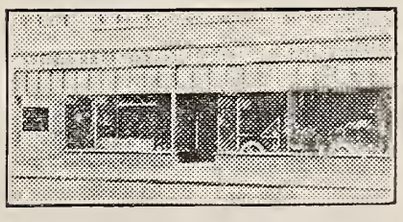




Winnipeg Branch and Service Station 246 Donald Street



Calgary Branch and Service Station 1305 East Street



Vancouver, B.C., Branch and Service Station, 825 Pender St.

RUSSELL MOTOR CAR CO., LIMITED

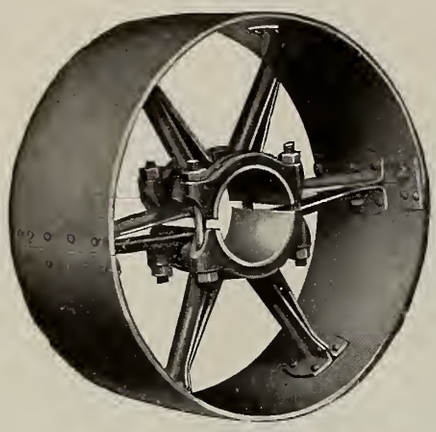
Executive Offices and Works: West Toronto

Branches at TORONTO, HAMILTON, MONTREAL, WINNIPEG, CALGARY AND VANCOUVER

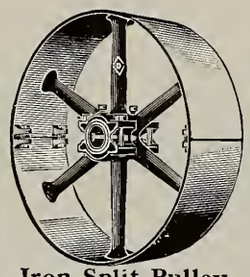
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MADE IN CANADA

Large stocks of everything in the line for quick shipment—our specialty



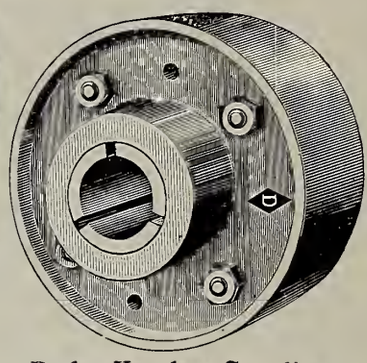
Dodge Steel Split Pulley



Iron Split Pulley



Dodge Wood Split Pulley



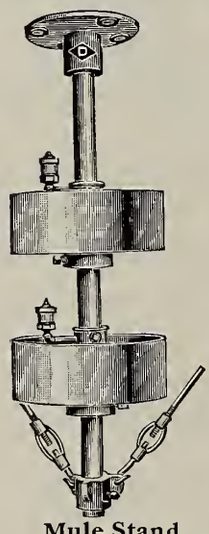
Dodge Key-less Coupling



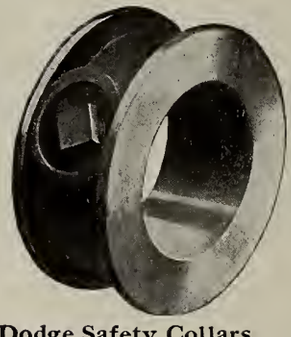
Dodge Rope Wheel



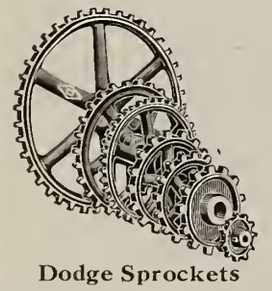
Dodge Rope Dressing



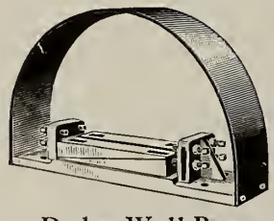
Mule Stand



Dodge Safety Collars



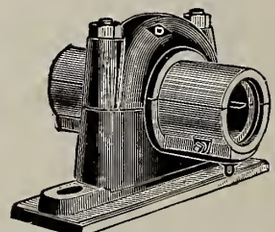
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Dodge Wall Box



Dodge Post Bearing



Dodge Pillow Block

We have the most complete range of patterns in Canada, covering everything in POWER TRANSMISSION MACHINERY.

And we make it all right here in Canada

Dodge quality and service is known everywhere. Have you our catalogue?

DODGE MANUFACTURING CO., LIMITED

TORONTO ∴ MONTREAL



By Royal Warrant

"Canadian Club" Whisky

Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

Distilled and Bottled by

HIRAM WALKER & SONS
LIMITED

Walkerville, Canada

LONDON CHICAGO NEW YORK MEXICO CITY VICTORIA, B.C.

EDDY'S



MATCHES

STEEL CASTINGS

From MALLEABLE STEEL, MANGANESE STEEL, CROME STEEL, Etc.

STEEL PROPELLER WHEELS
TURBINE WATER WHEELS, MILL GEARING, Etc.

THE WILLIAM KENNEDY & SONS, LIMITED
OWEN SOUND - - ONT.

CANADIAN TUBE & IRON CO., LIMITED
MONTREAL, CANADA

WROUGHT PIPE BLACK AND GALVANIZED 1/8 TO 4 INCH

Thoroughly inspected and tested
to 600 lbs. pressure and branded.

Ask Your Jobber for



Brand

Also BOLTS, NUTS, RIVETS—All Kinds

SELLING AGENTS:

Canadian Rolling Mills Co., Limited
BAR IRON AND STEEL

Colonial Wire Mfg. Co., Limited
WIRES, WIRE NAILS, WOOD SCREWS, ETC.

WORKS: LACHINE CANAL MONTREAL, CANADA

"Get Jones on the Phone"

A Factory Telephone System, worked automatically without the trouble and expense of a central operator, will keep you in close touch with "Jones," and with every other man in your factory, from the Superintendent to the Watchman.



A SWITCHBOARD WITHOUT AN OPERATOR

PRESTO-PHONE

gives you a factory telephone service that has the merits of simplicity, efficiency and economy. By pressing a lever you immediately get a connection with the department you wish.

Time is Money

YOU save money in your own time; you save money in the time of your employees; and you save money in the better service you give your customers.

Your own time? Yes. If you can keep in touch from your office with every man in your factory, every Departmental Head, every piece of work, you save the time that it would take to visit every corner of your building.

How many minutes a day are wasted in this way or in having a foreman come to you to report on his work? While he is doing that he is unproductive. And his workmen have not his supervision. An important matter, is it not?

Increases Efficiency

A house Telephone system preserves your organization. Every man is in his place. Every man is doing the work allotted to him.

And the central control is perfect. You at your desk have a closer supervision over your factory than the superintendent of the small shop has over his.

No Running Expenses

Our automatic system has no expense after the cost—a very moderate cost—of installation. There is no central operator. A child can use it.

SEND FOR BOOKLET ON AUTOMATIC FACTORY TELEPHONES

You will be interested.

We manufacture all kinds of Telephone Apparatus, Manual and Automatic.

The Canadian Independent Telephone Co., Limited

DUNCAN ST., TORONTO

When Wanting

JUTE AND COTTON BAGS

Of Any Description
Think of the

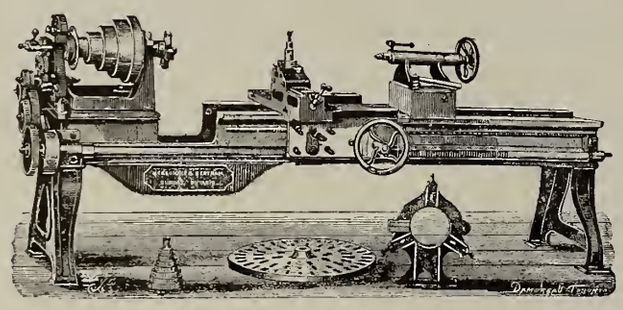
Smart-Woods, Limited

HEADQUARTERS FOR

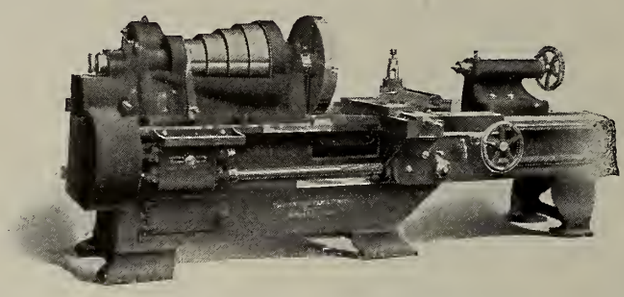
TENTS, AWNINGS. FLAGS
TARPAULINS, LUMBERMEN'S and
CONTRACTORS' SUPPLIES
and CLOTHING

Montreal · Ottawa · Toronto · Winnipeg

THE MARCH OF PROGRESS



36" GAP LATHE—1868



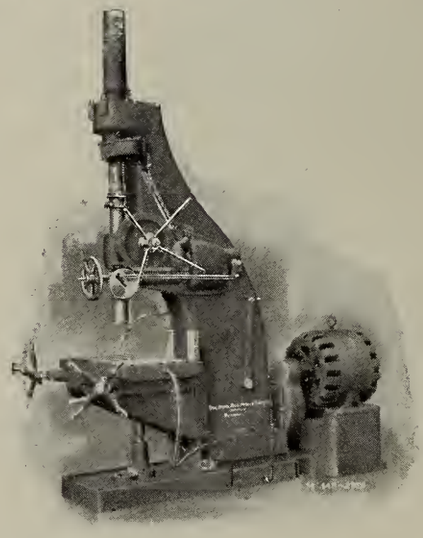
26" x 42" GAP LATHE—1914

49 YEARS AGO

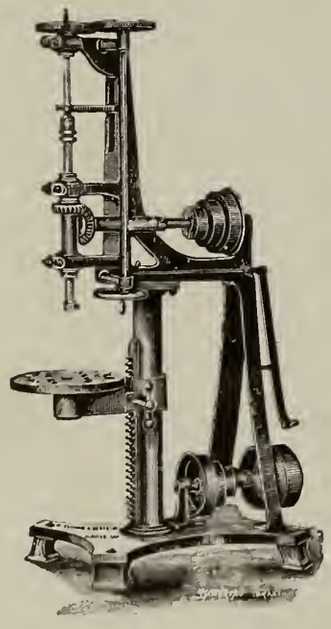
McKechnie & Bertram manufactured the first machine tools ever made in Canada on a commercial basis.

Our illustrations graphically show the wonderful advance of half a century in machine tool design.

The MARCH OF PROGRESS has made the pioneers of 1865 the leaders in Canadian tools to-day.



HEAVY DUTY DRILL—1914



No. 4 DRILL—1865

Our Record is Your Security

No concern could stand for half-a-century unless its product and its reputation were good—half a century of PROGRESS, SERVICE AND SQUARE DEALING stands behind

BERTRAM MACHINE TOOLS

And their reputation is founded on the solid rock of QUALITY

Let us quote you on your requirements.

THE JOHN BERTRAM & SONS CO., Limited

DUNDAS, ONTARIO, CANADA

723 Drummond Bldg.
MONTREAL

VANCOUVER

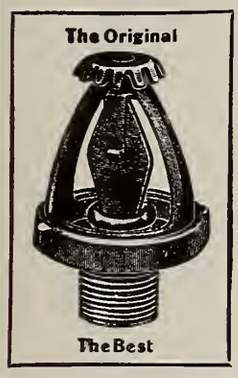
Bank of Hamilton Bldg.
WINNIPEG

PURDY, MANSELL LIMITED
TORONTO

Cut your Insurance in half by having us instal an

Automatic Fire Sprinkler System

throughout your Factory, Store or Warehouse.

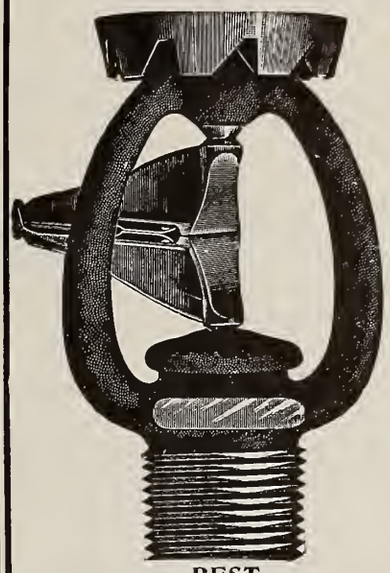


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Correspondence Solicited

VOGEL CO. of Canada
Limited

620-2 ST. PAUL STREET, MONTREAL



Esty : : Automatic Fire : : Sprinkler :

It will cut your insurance premium in half and protect you against loss by fire. Write for particulars

The Consolidated Mining and Smelting Co. of Canada, Limited

Business Office and Works: TRAIL, BRITISH COLUMBIA

SMELTERS AND REFINERS

Purchasers of all Classes of Ores.

. . . Producers of . . .

FINE GOLD, FINE SILVER BASE BULLION
COPPER MATTE, PIG LEAD, LEAD PIPE, BLUESTONE,
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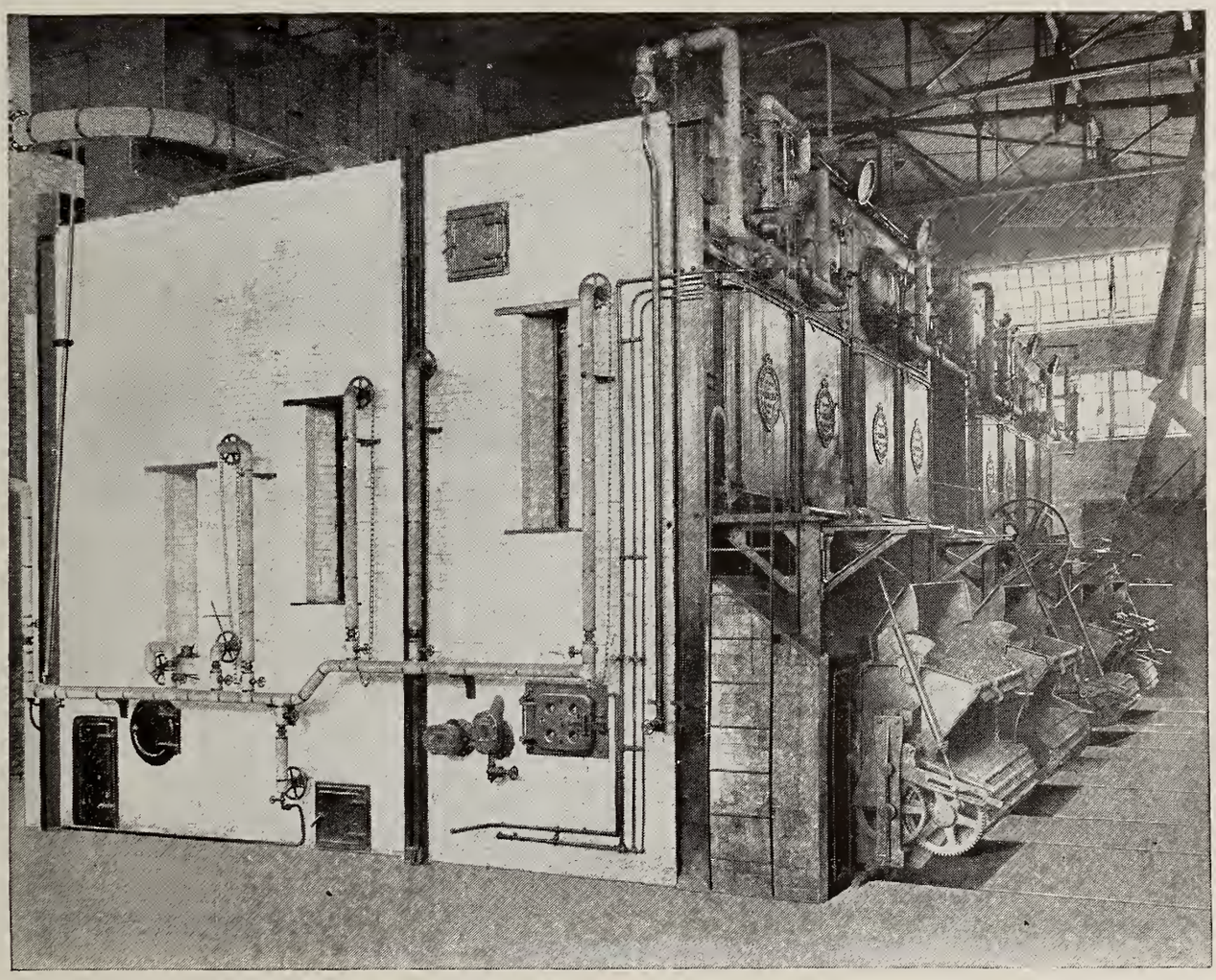


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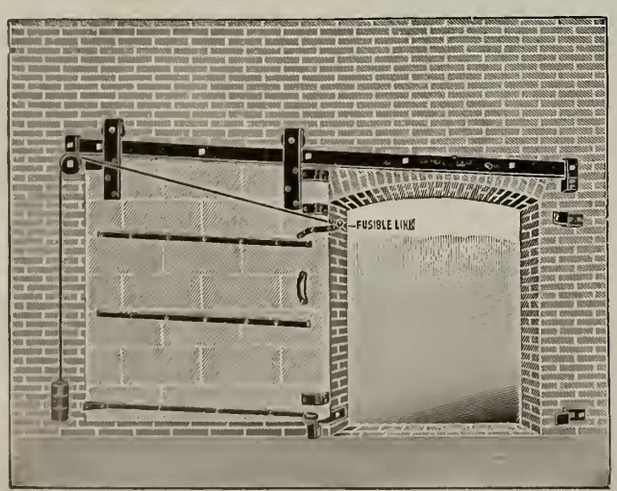
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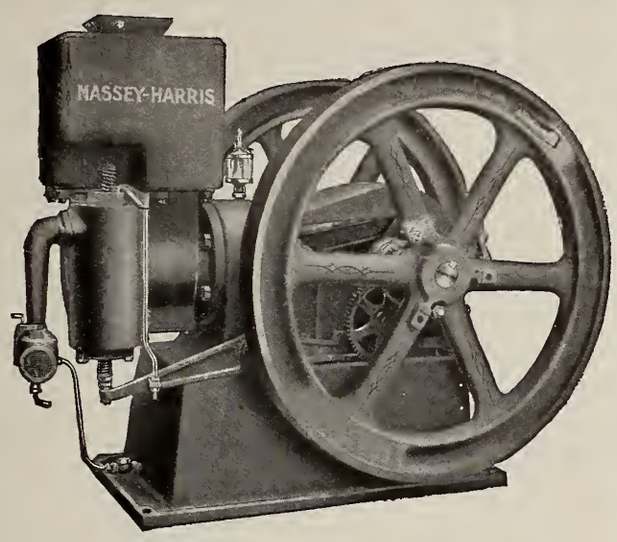
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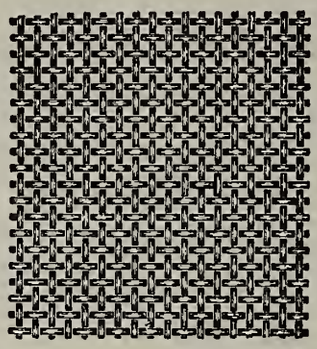
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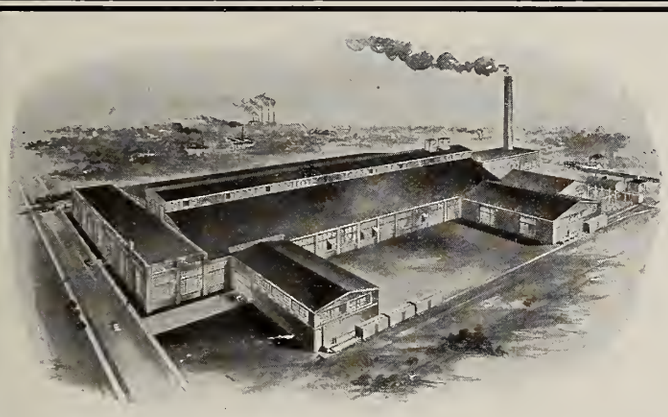
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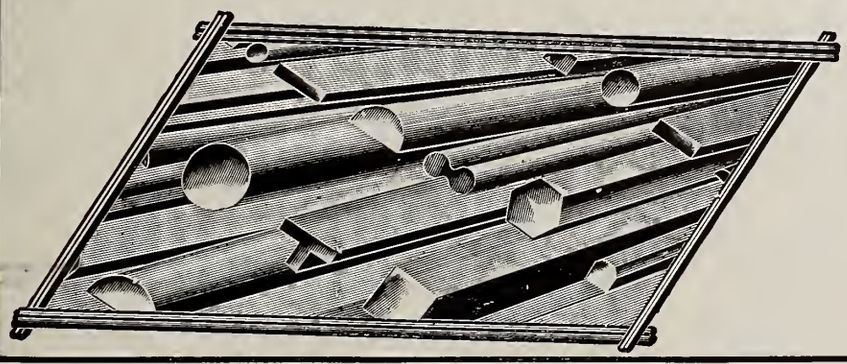
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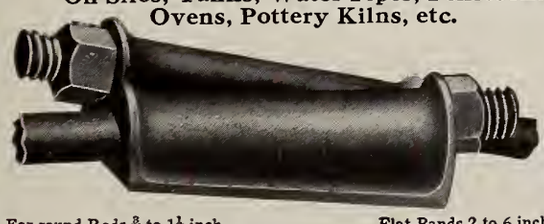
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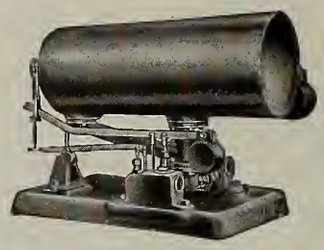
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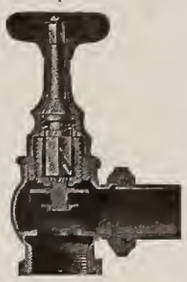
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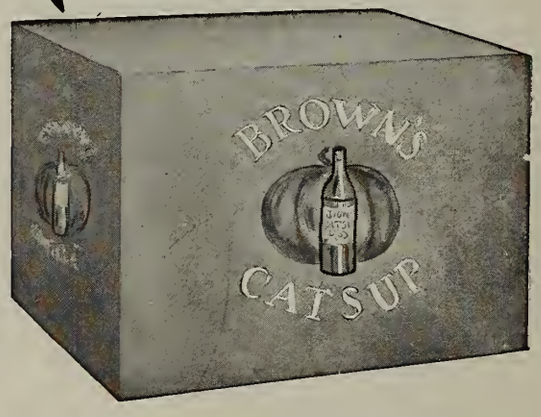
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H. & D. Corrugated Board Fibre Boxes

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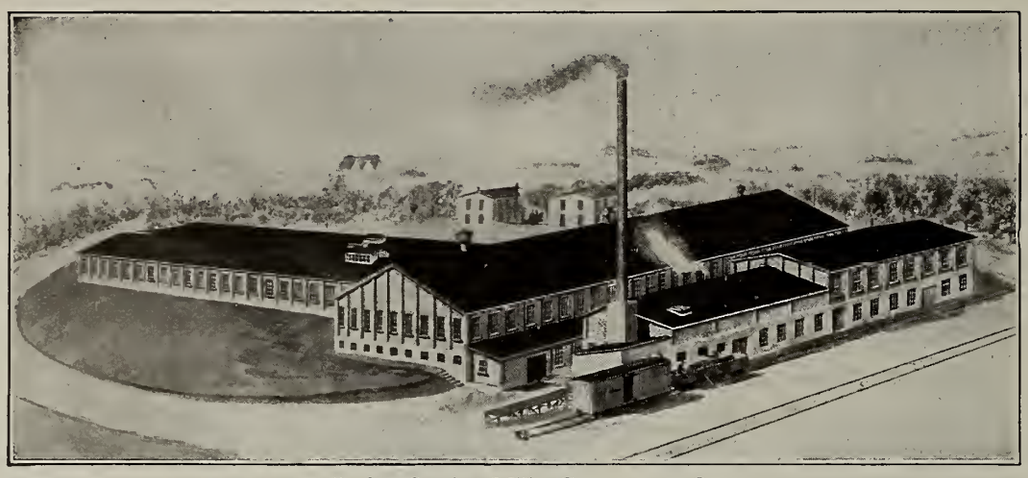
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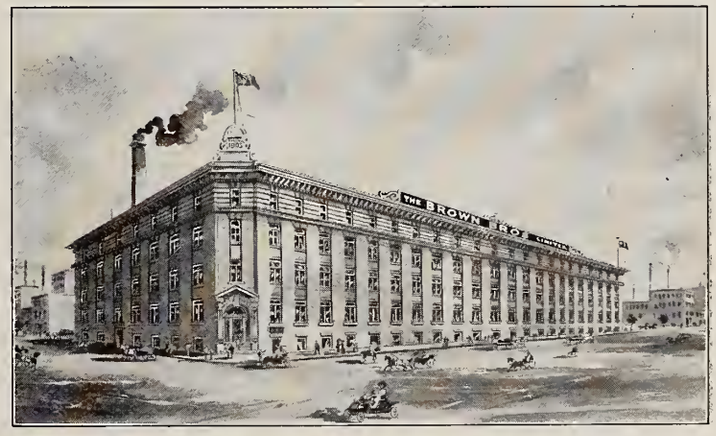
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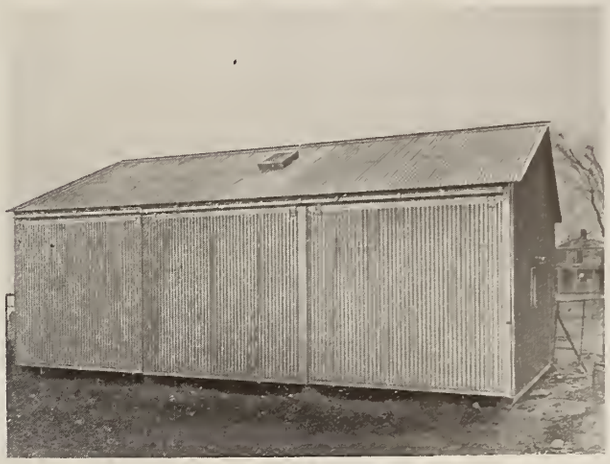


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NOTICE

To Manufacturers, Dealers and Users of Steam Boilers.

All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.

HON. FINLEY G. MACDIARMID, Minister of Public Works. D. M. MEDCALF, Chief Inspector of Steam Boilers.

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NOTICE

to

Stationary Engineers

Everyone operating a Stationary steam plant of 50 h.p. or over in the Province of Ontario must hold a Certificate from the Stationary Engineers' Board. Anyone operating such a plant without a Certificate is liable to the penalties set forth in the Stationary Engineers' Act.

HON. JAS. S. DUFF
Minister of Agriculture

W. C. McGHIE
Chairman of the Board

NOTICE

The following are the Factory Inspectors for the Province of Ontario:

JAS. T. BURKE, Chief Inspector, Parliament Buildings, Toronto.
H. A. CLARK, 432 Woodman Avenue, London.
A. W. HOLMES, Parliament Buildings, Toronto.
ROBERT HUNGERFORD, Parliament Buildings, Toronto.
MISS MARGARET CARLYLE, Parliament Buildings, Toronto.
MRS. A. BROWN, Parliament Buildings, Toronto.
THOMAS KEILTX, 25 Russell Avenue, Ottawa.
S. J. MALLION, 214 Wellington Street, Stratford.
FRED KELLOND, 157 Wellington Street South, Hamilton.
H. J. TUTT, 13 Enderby Road East, Toronto.

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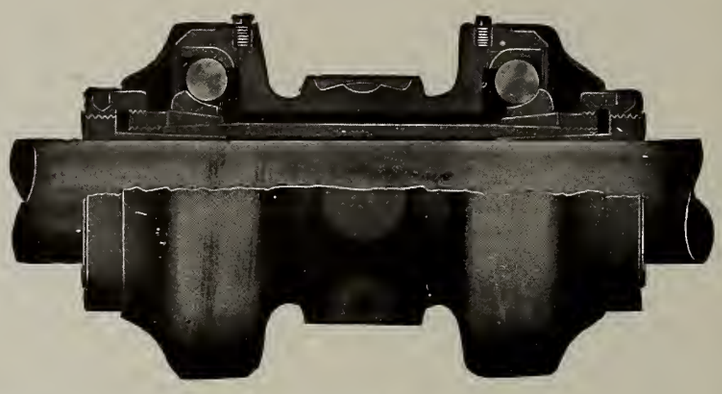
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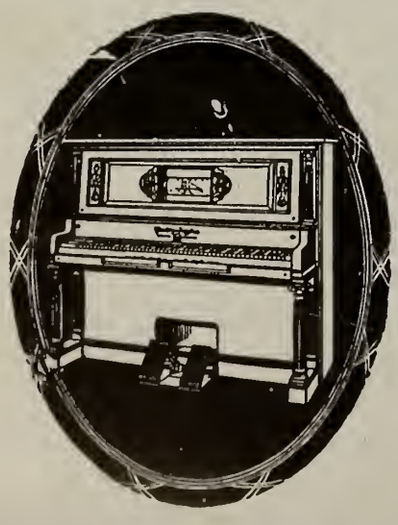
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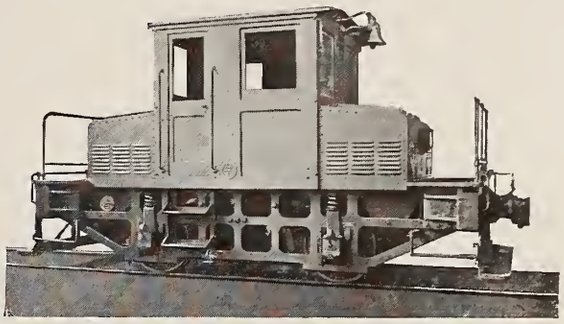
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Thirty per cent. of the battery charge can be renewed during the noon hour, so that the locomotives can be operated continuously during working hours without danger of battery failure.

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UNION BANK OF CANADA

FIFTIETH ANNUAL STATEMENT

30th NOVEMBER, 1914

PROFIT AND LOSS ACCOUNT

Balance at credit of account, 29th November, 1913	$ 90,579 03	Which has been applied as follows:—	
Net profits for the year, after deducting expenses of management, interest due depositors, reserving for interest and exchange, and making provision for bad and doubtful debts and for rebate on bills under discount, have amounted to	712,440 48	Dividend No. 108, 2 per cent., paid 2nd March, 1914	$100,000 00
		Dividend No. 109, 2 per cent., paid 1st June, 1914	100,000 00
		Dividend No. 110, 2 per cent., paid 1st September, 1914	100,000 00
		Dividend No. 111 2 per cent., payable 1st December, 1914	100,000 00
		Bonus of 1 per cent., payable 1st March, 1915, to shareholders of record as on 13th February, 1915	50,000 00
		Reserved for depreciation in securities owned by the Bank.	215,000 00
		Contribution to Canadian Patriotic Fund	25,000 00
		Contribution to Officers' Pension Fund	10,000 00
		Balance of Profits carried forward	103,019 51
	$803,019 51		$803,019 51

GENERAL STATEMENT—FIFTIETH ANNUAL BALANCE SHEET, 30th November, 1914

LIABILITIES.

Capital Stock		$ 5,000,000 00
Rest Account	$3,400,000 00	
Balance of Profit and Loss Account carried forward	103,019 51	
	$3,503,019 51	
Unclaimed Dividends	3,068 28	
Dividend No. 111	100,000 00	
Bonus payable 1st March, 1915, to Shareholders of record as on 13th February, 1915	50,000 00	
		$ 3,656,087 79
		$ 8,656,087 79
Notes of the Bank in circulation	$ 6,382,214 00	
Deposits not bearing interest	17,578,733 38	
Deposits bearing interest	45,867,181 32	
Balances due to other Banks in Canada	28,075 45	
Balances due to Banks and Banking Correspondents elsewhere than in Canada	949,381 56	
Bills payable	97,333 33	
		$70,902,919 04
Acceptances under Letters of Credit		1,988,590 91
Liabilities not included in the foregoing		14,252 20
		$81,561,849 94

ASSETS.

Gold and Silver Coin	$1,161,052 58	
Dominion Government Notes	5,949,614 00	
		$ 7,110,666 58
Deposits in the Central Gold Reserve		1,700,000 00
Notes of other Banks		649,580 00
Cheques on other Banks		2,436,309 10
Balances due by other Banks in Canada		96,561 62
Balances due by Banks and Banking Correspondents elsewhere than in Canada		2,980,292 19
Dominion and Provincial Government Securities not exceeding market value		570,707 50
Canadian Municipal Securities and British, Foreign and Colonial Public Securities other than Canadian		420,207 63
Railway and other Bonds, Debentures and Stocks not exceeding market value		3,454,799 73
Call and Short (not exceedings 30 days) Loans in Canada, on Bonds, Debentures and Stocks		3,122,068 74
Call and Short (not exceeding 30 days) Loans elsewhere than in Canada		3,908,346 51
		$26,449,539 60
Other Current Loans and Discounts in Canada (less rebate of interest)		$50,866,304 58
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)		472,815 49
Liabilities of customers under Letters of Credit, as per contra		1,988,590 91
Real Estate other than Bank Premises		165,784 80
Mortgages on Real Estate sold by the Bank		113,499 22
Overdue Debts, estimated loss provided for		310,561 51
Bank Premises, at not more than cost, less amounts written off		929,020 14
Deposit with the Minister of Finance for the purposes of the Circulation Fund		260,000 00
Other Assets not included in the foregoing		5,733 69
		$81,561,849 94

JOHN GALT, President.
G. H. BALFOUR, General Manager.

REPORT OF THE AUDITORS TO THE SHAREHOLDERS OF THE UNION BANK OF CANADA.

In accordance with the provisions of sub-sections 19 and 20 of Section 56 of the Bank Act, we report to the Shareholders as follows:

We have audited the above Balance Sheet with the books and vouchers at Head Office and with the certified returns from the branches.

We have obtained all the information and explanations that we have required, and are of opinion that the transactions of the Bank which have come under our notice have been within the powers of the Bank.

In addition to our verification at the 30th November, we have, during the year, checked the cash and verified the securities representing the investments of the Bank at its chief office and principal branches and found them to be in agreement with the entries in the books of the Bank relating thereto.

In our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the affairs of the Bank, according to the best of our information and the explanations given to us, and as shown by the books of the Bank.

T. HARRY WEBB, E. S. READ, C. R. HEGAN, Auditors,
of the firm of WEBB, READ, HEGAN, CALLINGHAM & CO., Chartered Accountants.

INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XV | TORONTO, FEBRUARY, 1915 | No. 7.

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

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The Railway Board and Freight Rates.

THE fact that the Interstate Commerce Commission has decided to allow the railways to increase their freight rates by five per cent. should not, in itself, be sufficient reason for the Dominion Railway Board to permit Canadian railways to make a similar increase.

We do not say that the Canadian railways should not increase their rates; on the contrary, we believe that public opinion would give lenient consideration to such increase, provided justifiable reasons could be advanced. But we do say that the Canadian railways should provide satisfactory proof of the necessity for such increase and also that the Dominion Railway Board should demand that this proof be forthcoming.

The United States railways had to prove their case before they were granted an increase. The Canadian railways should do the same.

Futher, the falling off in earnings of our railways is not alone a proof that rates are too low. This is a dangerous argument, because if it is contended that rates should be advanced when earnings fall, it must also be admitted that rates should fall when earnings rise, a condition of affairs which was not visible during the recent years of prosperity. The lean goes with the fat.

The Board is not concerned with the profitable management of railways. Its duty in regard to rates consists in determining that they are reasonable in proportion to operating costs and that they are not discriminatory.

All that we ask of the Board is to deal with Canadian rates on their own merits in a manner which will be fair to the railways and also to consumers.

Time for Road Building.

ROAD building seems to be one of the most practical methods of furnishing labor for the unemployed who will not be absorbed in the greater production movement. Our railways are now built, some say over built, and thousands of men, proficient with the pickaxe and shovel, are idle. Without roads to act as feeders. the earning power of our railways can never reach its maximum, and it seems reasonable to argue that this auxiliary work which must be done some time, should be done now when labor and materials are plentiful and cheap.

We hope that the programme of the Ontario Government, which involves the expenditure of $30.000,000, will be carried on. The Ontario Motor League is urging the construction of highways from Montreal to Windsor and from Prescott to Ottawa. Work has begun on the Toronto-Hamilton road and preparations are under way for an educational campaign throughout the Province on the advantages of good roads. In Quebec a much greater enterprise is under way, viz., a macadamized road from Rouse Point, N.Y., through Montreal, and thence to Quebec, a distance of 240 miles. Progress is being made in other provinces, but a comprehensive movement is needed, and it is gratifying to notice that the problem will be discussed from a national point of view at the Good Roads Convention which will be held in Toronto in March.

Farmers fronting on or adjacent to a highly improved road derive most benefit from it, a fact well illustrated by the apparent prosperity of the farming communities through which the state roads of New England and New York State pass, but other classes also obtain considerable advantage; in fact, the case for good roads has been proved so thoroughly in older countries that it needs no demon-

stration in Canada. All new countries have to struggle through the mud of pioneer days, but Canada is sufficiently past that stage to seize the present opportunity to build good roads on a great scale. Anyway we are rather generous with ourselves when we hide behind the "New Country" excuse; for, although settlement in Eastern Canada and the eastern part of the United States was practically simultaneous, in road building we are far behind.

Canadians as Foreign Buyers.

CANADIANS buy more goods outside their own country than the citizens of any other important nation in the world. Here is the average amount which each citizen of the following countries bought abroad in 1911, the latest year for which comparative statistics are available:

Canada	$70.24
Great Britain	61.55
Argentine	47.39
France	39.30
Germany	35.17
United States	16.63
Austria	12.61
Russia	3.40

It seems incredible that every Canadian annually spends $70.24 for foreign goods while Russians only spend $3.40 each abroad. Canadians must cut down their foreign purchases and buy more goods produced in their own country or face national bankruptcy.

Professor Leacock's Mistake.

PROFESSOR STEPHEN LEACOCK, of Montreal, Chief of the Department of Political Economy in McGill University, has won an international reputation, not only for his knowledge of economics, but also for able discussion of trade subjects. But we are told that Homer sometimes nods and, consequently, we are obliged to assume that a similar mental lapse has overcome Professor Leacock when we read the following statements written by him for the current issue of the *University Magazine*:

"The 'Made-in-Canada' campaign is twisted, in certain quarters, out of its proper meaning, to be used as a cry against the importation of American manufactures. If the 'Made-in-Canada' propaganda aims at making us a more industrious and self-reliant people, producing better things and cutting ourselves free from dependence on German dye, Austrian silks and Turkish tobacco it is well. But if it is used as a way for striking at the hand that helps us, I for one want none of it.

"Nay, in this winter of crisis, let me rather wear rubbers that are made in Schenectady, and a collar fashioned in Cohoes, and let me hear in my waistcoat pocket the ticking of a Connecticut watch that shall recall to my listening ear the heartbeat of New England anxious for the welfare of the Mother State."

Before attempting to analyze Professor Leacock's remarks we would like to direct his attention to the following, which appeared recently in *Greater New York*:

"Mr. S. C. Mead, Secretary of The Merchants' Association, was one of the speakers at the 'Made in the U.S.A.' meeting at The Merchants' Association on December 30th. It was decided by the meeting to ask the Chamber of Commerce of the United States to take up the movement, in which Mr. John H. Fahey, President of the Chamber, assured the meeting of its interest. Representatives of more than forty commercial organizations attended the meeting."

This is only one of numerous references, which can be read almost daily in the journals of the United States, to the "Made-in-the-U.S.A." campaign now under way in that country. Its object is similar to that of the "Made-in-Canada" campaign, namely, to persuade the citizens that they should patronize home industry. Yet, Canadians do not feel that, in pursuing this policy, the United States is "striking" at us. We believe that the United States is doing the right thing when it thinks of its own people first. It is merely a continuance of a policy which has been in force for years and which is the material illustration of Abraham Lincoln's great opinion: "I do not know much about the tariff, but I know this much, when we buy manufactured goods abroad we get the goods and the foreigner gets the money. When we buy the manufactured goods at home we get both the goods and the money."

Similarly the "Made-in-Canada" propaganda is as old as our industries and is only being pressed more urgently now because the necessity is greater. It seems extraordinary logic to argue that a "Made-in-Canada" campaign strikes at the United States, unless it is admitted that a "Made-in-the-U.S.A." campaign strikes at Canada. As a matter of fact we are not striking at each other at all, but, being both short of money, each nation is trying to keep its stock in circulation among its own citizens instead of distributing it among a great number of other countries for goods which are made at home. We should imagine that Professor Leacock can find rubbers and collars to fit him in Montreal and also a watch with which to time his economic lectures, but if Montreal fails, there are other cities in Canada which will attempt to meet his needs.

A Western Word to Banks.

"THE people's money in a producing country should be available, and under proper safeguard, at the disposal of the people," says the *Canadian Thresherman and Farmer*, of Winnipeg, in a vigorous editorial protest against what it considers to be the ultra-conservative attitude of Canadian banks in regard to making loans to producers at the present time.

"We would suggest that loans for farming and industrial development should take precedence of all others."

The common defence of the banks is that they are merely the custodians of the people's savings, which must not only be guarded from loss, but must also be available instantly upon demand. This attitude, within reasonable limits, is the only one consistent with banking principles and, when their own safety and interest are wrapped up in the safety and interest of their depositors, the conservatism of the banks is natural and sound.

The criticism which might possibly be made of our bankers is that they are following too closely their usual practice, in spite of the fact that a very unusual set of conditions has been suddenly created. Unusual situations need unusual measures. At present our farmers are receiving earnest requests for "Production, production, more production." The fruits of this production will be sold at extraordinary prices, but in many cases the producers will have to be partially financed. Manufacturers are attempting to keep enormous numbers of men at work until the "Made-in-Canada" campaign, the sale of natural produce, and the fortunes of war exert their beneficial influences, and need the co-operation of bankers if they are to hold on successfully. Bankers have extraordinary problems and troubles to face, a fact which is perhaps not always sufficiently appreciated, but it seems to be the proper time to assist the producer, in whom our hopes are centred, until he can realize on his produce.

The Danbury Hatters' Decision.

THAT trade union members must pay for damage they cause their employers by using the boycott as a weapon to enforce their demands has been laid down by the recent decision of the United States Supreme Court in the famous Danbury Hatters' Case.

This suit was begun by D. E. Loewe and Company, Danbury, Connecticut, hatters, against 186 members of the United Hatters Union several years ago because the Union proclaimed a boycott on the company as a punishment for venturing to conduct their business on lines which did not meet with the approval of the union leaders. After considerable litigation, the New York Federal Courts declared that the action of the Hatters Union, being a "restraint of trade," was an offence against the Sherman anti-trust law and awarded the company $252,000 damages. This decision has been confirmed by the Supreme Court. As a result, union members throughout the United States will realize that they are to be held personally responsible by the law for the conduct of their officials, and this knowledge will have a chilling influence upon the advocates of boycott and other illegal methods of settling trade disputes.

Falling Off in Canadian Trade.

THE total trade of Canada for the nine months ending December, 1914, shows a falling off of $189,297,184, compared with the total trade for the same period of the preceding year according to the following official statistics:

	Nine Months Ending Dec., 1913	Nine Months Ending Dec., 1914	Decrease
Merchandise entered for consumption ...	$485,751,485	$348,746,920	$137,004,565
Merchandise domestic —exported.	359,115,658	306,823,039	52,282,619
Total mechandise for consumption and domestic exported	844,867,143	655,569,959	189,297,184

From the above, the statistics for coin and bullion and the exports of foreign merchandise have been omitted, as they have no real bearing on our national account. The great decrease in imports entered for consumption, which must be beneficial, could mean one of two things—we have simply dropped that amount of foreign purchasing, or we have not only dropped it, but we have replaced part of it with Canadian-made goods. Everything points to the conclusion that the latter is the true state of affairs and the extent of such displacement of previously imported goods with Canadian goods and further increased displacement depends upon the success of the "Made-in-Canada" campaign.



THE LATE HON. GEORGE CLARE, M.P.

January claimed one of Canada's most prominent manufacturers in the person of Hon. George Clare, M.P. for South Waterloo and a member of the firm of Clare Brothers and Company, Preston, Ont. The deceased was widely known for his services to the manufacturers of this country, and his death caused widespread regret.

The decrease in exports is disappointing but expected and is due to the partial suspension of foreign demand for manufactured goods, to the shrinkage of agricultural production in 1914, and to the heavy sales of live stock to the United States following the introduction of the Underwood Tariff. The apparently contradictory fact that Canadian exports of manufactures have increased at the average rate of about two million dollars a month since the beginning of the war is met by the explanation that probably double this increase is represented by war orders, so that, in the usual lines of manufactured goods, we have lost ground.

What are the prospects for 1915?

It is practically certain that imports will continue to fall and that the decrease will be partially replaced with goods made in this country. It seems probable that our exports should show a gain over 1914. Increased acreage and the good chance of a better crop, saleable at high prices, should provide great stimulus to our agricultural exports, and the shipment of the war orders, added to other foreign business, should at least restore exports to their normal mark.

Our exports will probably surpass our imports in 1915, a feat which has not been accomplished since 1901. The

preceding table shows that, for the last nine months of 1914, imports were only about $45,000,000 greater than exports, whereas, for the fiscal year, 1913, the excess of imports was nearly $300,000.

The New Australian Tariff.

THE proposed increase in the general tariff of Australia will adversely affect Canadian manufacturers unless steps are taken by our Government to obtain the same preference that is granted to the United Kingdom.

British manufacturers, who now enjoy a preference, will secure a greater relative advantage. This colonial attitude is highly commendable at the present time when Great Britain is making her supreme struggle, but we hope that a corresponding advantage may be secured for Canadian products, thus advancing towards the goal of imperial preferential treatment among the various parts of the British Empire. In passing, we might mention that the new Australian preference in favor of British goods appears to be still less than the preference given by Canada to British goods.

United States manufacturers, in many cases, will also benefit indirectly, owing to the strict declaration which Australia requires regarding the home selling price of imports. For example, take the case of a United States manufacturer and a Canadian manufacturer who export the same article to Australia. Both are required to declare the price at which the article is sold in the country of origin. When the United States price is lower, owing to special conditions, the Canadian article is charged a higher rate of duty, and, consequently, the Canadian manufacturer is handicapped.

Keeping Down Compensation Rates.

THE Workmen's Compensation Act now in operation in Ontario will bring home to manufacturers the great truth that the levies made upon them for compensation will be in direct ratio to the number of accidents. Therefore, if they wish to lower their assessments they must preach and teach the principles of industrial safety. There are two things which should be used in safety instruction, organization and devices. Experience shows that organization is responsible for about two-thirds, and devices for about one-third, of the progress made in the prevention of accidents. The term "organization" is a broad one and includes instruction, the formation of workmen's classes, and education in all applicable forms. There is a regrettable tendency towards individualism among industrial workers. The principle embodied in "Every man for himself" destroys the chance of co-operation and discriminates against those who are slow of mind or weak in body. Workers must realize that they should not only be careful of themselves, but also of their fellows. The prejudice against safety devices must be dissipated. Too many workmen are reluctant to make proper use of such devices through the false notion that they are a reflection upon efficiency, or, in the case of piece workers, a limitation upon output. The old idea that accidents, like diseases, are the visitations of an angry Providence is now an absurdity. Physicians are proving that most diseases are preventable and when they occur are punishments for breaches of natural laws; similarly, workmen must learn that most accidents are avoidable, and are penalties for neglecting safety regulations.

Manufacturers are staggering under many burdens at present and the imposition of high compensation rates will be an added load. Would it not be advisable, now that factory workers are at low speed, or are only employed part of the time, to organize classes among them for instruction in the prevention of accidents and the use of safety devices?

Silence Not Acquiescence.

PUBLISHED statements of the Ontario Workmen's Compensation Board convey the impression that the Act now in force is operating to the common delight of all concerned.

Doubtless the employees are delighted, the Board seems to be paternally pleased, but the manufacturers' pleasure is restricted to the contemplation of other people's happiness.

When the Bill was before the Legislature, the Government admitted that it contained many defects and contradictions, but promised that these would disappear under the elastic administration of able commissioners. The manufacturers, waiting in vain for the fulfilment of this promise, are now greeted by the newspaper statements of the Board that all is well. All is very far from being well, and since continued silence on the part of manufacturers might be regarded as acquiescence, they are compelled to draw public attention to some of the most glaring defects in the Act which have not been eliminated by administration. An analysis of these defects appears on page 730 of this issue.

"Patriotism and Production."

THERE is no better way for Canadians to fight the Germans than by helping to supply Great Britain and her allies with food. There is no quicker way to restore prosperity in Canada than by greatly increasing our agricultural production. These two truths lie behind the "Patriotism and Production" movement, now under way in this country, which is described in a book entitled "Agricultural War Book," recently issued by the Department of Agriculture. In the preface, the Hon. Martin Burrell appeals to the farmers of Canada as follows:

"Should the war continue into the summer of this year, the food production in Europe cannot approach that of normal years. Looking at the situation in even its most favorable light there will be a demand for food that the world will find great difficulty in supplying. Canada is responding promptly to the call of the Motherland for

men and equipment. Britain needs more than men, she must have food—food this year and food next year. We are sending of our surplus now. We should prepare for a larger surplus this year and next year. The Government is strongly impressed with the desirability of increasing the crop acreage in Canada. The Canadian farmer, earnestly bending all his energies to increase the food supply for the Britisher at home and the British soldiers at the front, is doing his share in the gigantic struggle of the Empire."

There is already conclusive evidence that the farmers recognize their opportunities. In reply to an inquiry from INDUSTRIAL CANADA, Mr C. C. James, Special Commissioner of the Dominion Government, estimates that about 20 per cent. more land was plowed in the fall of 1914 than in the fall of 1913. Granted favorable conditions for grain growing and a continuance of war prices, we may easily produce a crop in 1915 which will be from 20 to 50 per cent. greater in amount and more than double the value of our normal crop.



THE LATE W. H. ROWLEY

President of the E. B. Eddy Co., Hull, Que.

By the death of Mr. W. H. Rowley, President of the E. B. Eddy Company, which occurred suddenly in Toronto on January 12th, the Canadian Manufacturers Association lost one of its most enthusiastic and capable members, as well as one of its staunchest supporters. For many years he was a member of the Executive Council, and after serving as Vice-President for Quebec and Vice-President for Canada, he was elected President in 1910-1911. He believed strongly in Protection, and was one of the leaders of the Anti-Reciprocity Campaign in 1911.

The Ford Equipment.

THE remarkable profit-sharing experiment of Henry Ford, of the Ford Motor Company is apparently resulting satisfactorily for Mr. Ford and his employees, and he is entitled to the heartiest congratulations for his success.

While anxious to avoid the appearance of detracting from that success, we wish to point out the danger of drawing inferences from it which would be unfair to other manufacturers.

Mr. Ford discovered an industrial field somewhat as a prospector discovers a rich gold mine and by his ability and industry he had secured that field practically free of competition before his scheme was put into operation.

But how many manufacturers are in this fortunate position either as regards profits or competition? Profits must be made before they can be shared, and it is unreasonable to argue that Mr. Ford's example should be followed in cases when the conditions which made his scheme possible are lacking.

Mr. Ford states that the introduction of the eight hour day has proved to be a success in his factories, and immediately the contention is raised that it should be adopted in other factories. "This seems to indicate," says the *Toronto Globe*, "that the proper division of the twenty-four hour day is into eight hours for work, eight for rest and eight for sleep." It is an attractive division, but it could scarcely be applied to farming, or even to the making of newspapers, and we venture the statement that there is as much difference between automobile manufacturing and many other industries as there is between automobile making and farming.

That Mr. Ford has made a success of sharing profits and in reducing work hours is creditable, but it is no proof that his system could be generally applied to all branches of manufacturing. To expect all other manufacturers to employ similar methods would be as unreasonable as to exhort Mr. Andrew Carnegie's fellow manufacturers to keep pace with him in donating libraries.

Watch the Smugglers.

CUSTOMS officials should wage a war of their own against smugglers at the present time.

Smuggling goods into Canada has always been a practice more or less prevalent among the unpatriotic citizens of this country. In good times the evil effect of this custom is reduced by the prosperity of home factories, but in hard times, when smuggling usually increases owing to low prices abroad, it is especially desirable that our factory output should not be further reduced by the activities of smugglers, and that our falling revenues should not be further diminished by cheating the Customs.

MAKING SHRAPNEL SHELLS IN CANADA*

By JOHN PRESTON.

Superintendent Ordnance Dept., Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IN order that the process of manufacturing these shells might be more easily understood, a brief description of the shell and how it is used will be given:—

These shells are commonly used in sizes for 15 and 18 pound quick-firing guns, and also in the larger size for 60 pound and 4.7 in. guns of the same type.

The majority of the "MADE-IN-CANADA" shells are 18 pounders, and the following description will refer particularly to shells of this size.

In general this ammunition consists of a drawn brass cartridge case filled with a high explosive. To the open end of the cartridge is fixed a bullet-shaped hollow steel case, usually referred to as the shell.

By referring to figure 3 it will be noted the shell contains a charge of high explosive powder (Mk A) segregated in a tin case with a sealed cover (Mk B) held in place by a steel diaphragm (Mk C). Ahead of the diaphragm the shell contains a number of lead bullets (Mk D) held in position with resin. A brass tube in the centre of the shell (Mk E) is for the purpose of holding an extension of the time fuse, which consists of a slow-burning powder (Mk F), and forming a passage for this fuse between the explosive charge and the detonator or time fuse at the nose of the projectile.

The brass tube is screwed into the steel diaphragm at one end and fitted into and soldered to a brass socket (Mk G), which is screwed into the nose of the shell and also threaded to receive the time fuse and detonator.

The explosive charge in the cartridge gives the shell a velocity of about 1,600 ft. per second at the muzzle, and the shell is effective for ranges of approximately 8,000 yards.

The minimum range at which the shell may be exploded with the time fuse is, say, 100 yards, and this may be extended up to the full range of the gun.

The time fuse is ignited by the gases from the explosion of the propelling charge, but should the time fuse fail the shell will be exploded on impact through the action of the detonator. The explosion of the charge in the base of the shell gives additional velocity to the bullets in a forward direction, and they are scattered over an area of considerable width.

In proceeding with the manufacture of these shells 3½ in. round steel bars of suitable carbon content are selected, the specification providing that the steel after being annealed by heating to 1,700–1,800 degrees F., and cooling in powdered charcoal, shall pass the following physical tests:

(*a*) Yielding stress—not less than 42,560 lbs. per square inch.
(*b*) Ultimate tensile strength—not less than 78,400 lbs. per square inch.
(*c*) Elongation—not less than 20% in a test piece 2 inches long and 0.564 inch diameter.

Forging blanks are prepared in lengths of 4½ in. by 3½ in. by cutting off the bars individually to the desired length in rotary bar parting machines or sawing off a number of pieces at a time by a cold saw fitted with special attachments for this purpose.

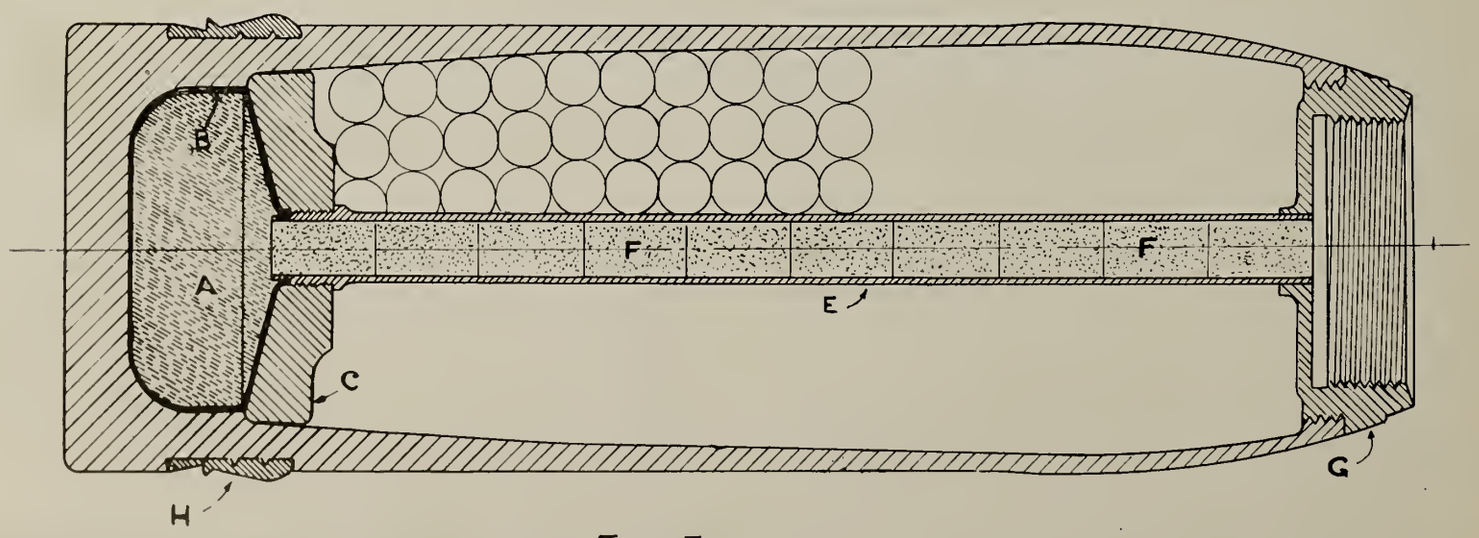
The forging of the shell is done in a hydraulic press of at least 300 tons pressure and having a stroke a little over thrice the length of the shell.

It is advisable to have at least two presses and two heating furnaces so that the process of punching and drawing of the shells may be continuous. After heating the blanks in the first furnace they are placed in a die and the first punching operation is proceeded with. This consists of forcing a round-nosed punch having a diameter of about 3 inches into the blank to within about 1½ inches of the bottom.

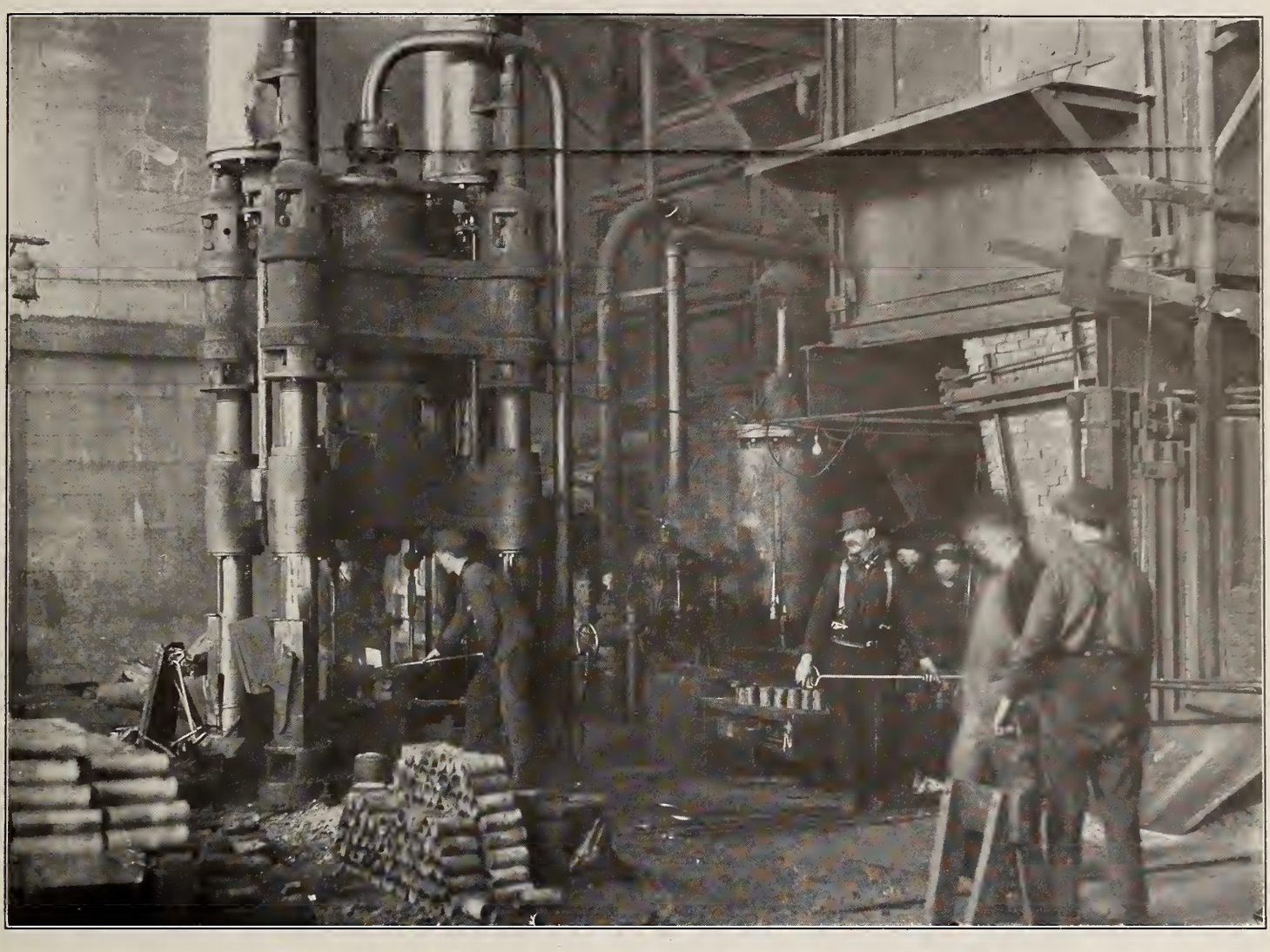
On account of the die holding the forging to the original diameter of the blank the metal is forced upward around the punch so that when finished the forging has a length of approximately 8 inches.

After reheating, the punched blank is taken to the second press, fitted with a punch of the exact profile of finished forged inside dimensions of the shell, the forging being placed over a die having an enclosed bottom, it is forced against the die

* Note.—As many Canadian plants are now busy manufacturing thousands of shrapnel shells for the Allies, this interesting article dealing with their manufacture was specially prepared at the request of Industrial Canada, for the information of its readers.



— FIG. 3. —



Hydraulic Press forging 18-pounder steel blank shells in the plant of the Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

bottom with a punch and the tin cup and diaphragm seat formed. After reversing the press this bottoming die is removed and the forging is forced through an open die which draws the shell to the proper outside diameter and length, the forging at this stage taking the form shown in Fig. 1, except that the ends are not trimmed. After this, the forgings are annealed and are then ready for the first machining operations.

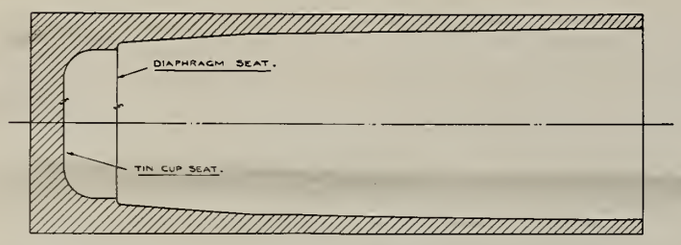
The usual practice is to part off the open end of the shell in a rotary bar-parting machine and face off the base in an engine lathe, or do these operations simultaneously in a cold saw equipped with a saw for parting and a milling cutter for trimming the base, the latter process being somewhat cheaper, as several shells may be trimmed at a time.

The second operation consists of rough turning the outside of the body and finishing the base and body up to the copper band groove, as shown in fig. 2. This is invariably done in a hollow spindle lathe having a turret and fillet with an adjustable mandrel on which the shell is centred, so that the outside turning is maintained concentric with the inside forged surfaces. As it is necessary to have additional driving power over that furnished by the mandrel the shell is gripped from the inside with a chuck and also driven by a clamp from the outside.

In some cases the groove and wave ribs for holding the copper band are also turned in this lathe, in this case taking three independent operations to perform while others do it on a separate lathe filled up with attachments to do the three operations simultaneously. The groove and wave ribs are shown at "A" in fig. 2.

The third operation consists of finishing the inside for the tin cup and diaphragm seat, this usually being done with roughing and finishing cutters. The part of the shell left unfinished on the outside in the second operation is now completed, making it ready to proceed with either the groove turning, if this was not completed in the second operation, or the heat treatment, usually referred to as the fifth operation. This treatment consists of heating the shell to a temperature depending on the carbon content and cooling in a tempering oil. The heating may be done in a regular heating furnace of the direct flame-heating type, using a flame having a reducing action or a furnace of the muffle type, which is preferable, or in a molten lead bath, the advantages of the latter being even heating, perfect exclusion of air from the piece being treated. They also heat quickly, consequently no burning out of the surface carbon is liable to take place. Lead bath furnaces being easily controlled will usually give more uniform results with less experienced furnace men.

In the latter method it is necessary to weight the shells to prevent them from floating, and it is advisable to arrange the lead pot so that the shells will maintain a stationary position. The heating is usually carried to a temperature of about 1,560° F., and after plunging in oil they are drawn at a temperature of about 900° F.



— FIG. 1. —

The sixth operation consists of nosing the shell, that is altering the shape of the open end in a die from the form shown in Fig. 2 to that in Fig. 3. This is done by heating the nose for a distance of about 2½ in. in a lead bath, and after forming in a die, it is reheated at this point and annealed.

The seventh operation consists of turning the inside and outside of the nose and threading it to receive the brass plug. This is done in a lathe of the turret type, the boring and outside turning of nose being done on a forming attachment. The tapping may be done with a collapsable tap, but even with a solid tap it is necessary afterwards to tap out with a hand tap on account of the very narrow limits allowed on the threads.

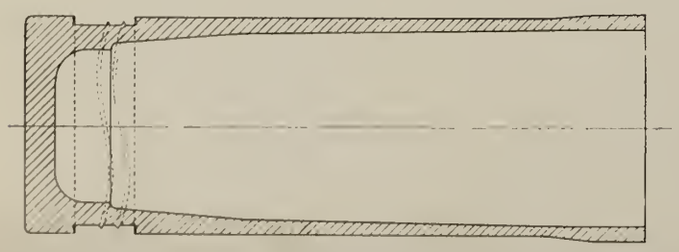
The steel shell is now ready to be finished to final dimension on the outside, and this may be done in two operations, usually known as the eighth and ninth. This work may be done on two lathes, using one for turning the shell body and the other having a forming attachment, is used for the nose.

An alternative arrangement is to finish this portion of the shell in a wet grinder, and it has the advantage of greater outputs, particularly where the shells are harder than is necessary to give the required tensile tests; but the method so far is not much used.

The eleventh operation consists of pressing on the copper band (Mk H), Fig. 3. This is made from annealed copper tubing of sufficient size to slip over the butt end. It is usual to press the copper band into the groove with a special hydraulic press having six or more cylinders, the rams of which are fitted with hardened steel dies of the proper curvature to insure a close fit of the copper against the steel. For shells of this size it requires a pressure of from 30 to 40 tons to get the required results. It is important in this operation that the groove is quite free from oil scale or other foreign matter to insure proper contact.

After this is completed, the band is turned to the correct shape by first roughing, and then finishing with a profiled cutter, thus completing the eleventh operation.

The shell is now ready for filling, and this is completed with the exception of the bursting charge. The shell diaphragm having been inserted previous to the nosing operation, it is possible to pass the tin cup past the diaphragm to its proper seat, after which the diaphragm is pressed solidly into position and gauged for location. The brass tube (Mk E), Fig. 3, is then screwed into the diaphragm and maintained in alignment by a centering gauge, while the bullets are packed



— FIG 2. —

in position. The bullets are a composition of lead and antimony, and it is required that the shell contains at least 375, and their weight must amount to 9 lbs. 1¾ ozs.

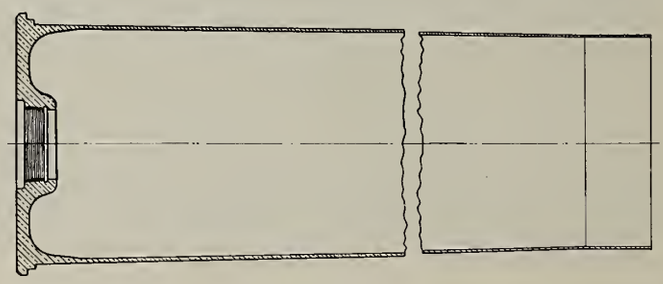
The adjustment of weight is obtained by the addition of not more than three or four buckshot.

In order to prevent a movement of the bullets, which would destroy the balance of the projectile, the interior of the shell, after the bullets are included, is filled with melted resin, which hardens on cooling.

After the brass nose socket is screwed into place and the tube soldered where it passes through it, the nose is turned to correct shape in the twelfth operation. This is usually done in a lathe of the turret type with two profile tools. In this operation it is necessary to guard against the possibility of solder entering the brass tube or thread of the nose, taps and reamers being used to remove the solder should it be necessary.

During the process of forging and all machine operations the shell is subject to inspection by Government inspectors, and following the twelfth operation there is a final overall inspection for defects in machining and weight.

Following this the shells are stamped, showing the size, date of manufacture, serial lot number, and manufacturer's name or trade mark. In doing this it is usual to use a stamping machine, which greatly reduces the time of doing this work. The shells are then painted all over and again painted near the nose with some distinguishing mark, frequently in



—FIG. 4.—

the form of a band in order to quickly distinguish the particular type of shell from all others of the same size, but different pattern. The body painting and painting of nose, when colored band is used, may be done to advantage in a small lathe and the shells placed in a heated oven to assure quick drying.

Following this, a brass plug is screwed into the brass nose socket to protect it against injury in shipping, the plug being removed when it is necessary to fill the shell with the explosive charge, and afterwards again removed when the time fuse is inserted immediately before firing. Where an order for shells only is in hand, this completes the work, and they are now ready to be packed for shipment.

Specially prepared iron-bound wooden boxes are made up to accommodate six shells packed in a manner that will prevent all injury. The box is supplied with a cover, and a handle at each end gives means of easy handling. Should an order be received for fixed ammunition it is also necessary to supply the drawn brass cartridge, complete with detonator and explosive, and attach the shell to the cartridge.

In order to facilitate the drawing of the cartridge case it is usual to use an equipment of about eight presses, the circular blank being gradually drawn into shape as it is worked through each press.

Table in Fig. 5 shows a balanced equipment capable of turning out 2,700 cases in eight hours.

After the final pass is completed the dimensions of the shell barrel are correct for both inside and outside sizes, but

it is necessary to machine both the inside and outside of the base in order to give it the proper shape at this point. After doing this the shell is bored out and turned on the base and tapped to receive the detonator.

The brass cartridge cases are usually sent to the fixing plant of the manufacturer of the explosive, and they are charged, the shell inserted and secured—the combined cartridge case and shell tested as to correct length, etc., and assembled at some central point.

It is found in practice that the cartridge cases may be used several times in service before becoming sufficiently deformed that they are useless, so that it is usual when ordering fixed ammunition to order at least twice as many additional shells.

Item		From Stage in Inches	Speed of from strokes per minute	Operation	Quantity of Cartridges in 8 Hours	Weight in Pounds about	Horse Power Required during Stroke (Approximate)
A	Press D.G. 56 with Dial, Steel Geared & Pin Clutch	7	30	Cut & Cup	3600	4500	15
B	Press D.G.S.S. with Dial & Steel Twin Gears	15	12	1st & 2nd Draws	4800	21000	15
C	Press D.G.S.S. with Dial & Steel Twin Gears	20	12	3rd & 4th Draws	4800	21000	20
D	Press P.G.3 without Bed	2	60	Trimming	4800	4400	5
E	Press D.A.S. Double Ended	40	3	5th & 7th Draws	2900	16000	40
F	Press D.A.S. Double Ended	40	3	6th & 8th Draws	2900	10000	40
G	Press E.56	2	20	Shearing & Heading	4800	36000	25
H	Press D.G.S.S. with Steel Twin Gears	31	12	Annealing	2800	13000	10

—Fig. 5.—

CANADA—JAMAICA TRADE

Should be Increased, Says Mr. Edgar, of Hamilton, Bermuda

"Just now, when Canadian manufacturers are in need of additional markets for their products, it might be well to ascertain why so little business is done between Canada and Jamaica. The reason appears to consist in a lack of understanding on the part of both Jamaicans and Canadians as to the actual state of business conditions in each other's country," writes Mr. H. W. Edgar, of Hamilton, Bermuda, to Industrial Canada.

"Canada at present receives only 5 per cent. of the total Jamaica exports, England 13 per cent., and the United States 59 per cent.; of Jamaica imports Canada supplies 9 per cent., England 43 per cent., and the United States 41 per cent. These figures speak for themselves, and show great room for expansion in trade between the two countries; particularly as the banking facilities are so good, two large Canadian banks, the Royal Bank and the Bank of Nova Scotia, having branches in Jamaica.

Might be Made by Canada.

"A good proportion of the goods now imported by Jamaica could undoubtedly be furnished by Canada. Of a total import trade of some £3,000,000 Jamaica uses £1,000,000 of foodstuffs, £600,000 of clothing and boots, £150,000 of hardware and ironmongery, and £200,000 of building material. Surely Canada is in a position to supply more than nine per cent of these!

"Canada could also use a great quantity of Jamaica produce, and, other things being equal, Jamaica firms would prefer to do business with Canada, if for no other than Imperial reasons. Now, where is the trouble?

"Canadians in the first place claim that it is most difficult to get Jamaica produce up to sample, while Jamaicans state that Canadian firms are the hardest in the world to deal with, and that the claims arising out of Canadian shipments are unreasonably plentiful.

Inaccuracy on Both Sides.

"While there may be some foundation for both these contentions, neither one is quite true. No doubt some Jamaica firms are careless in allowing goods to go forward that should never be shipped, but this is not the case with the best houses, and trouble can be avoided by dealing with the right people. It is also hard to believe that all Canadians are chronic kickers, and while a few years ago business was often done in a small and narrow way, nowadays there must be many firms in Canada who are as broad in their dealings as any in the world.

"Canadians should realize that a very large proportion of products such as cacao, coffee, etc., is grown by the small settler in Jamaica, whose entire cultivation amounts to only an acre or so, and who carries his produce to the dealer in lots sometimes as small as a few pounds at a time. It is important, therefore, to deal with an exporter who will grade his produce and send along a shipment uniform in quality.

"Jamaica has been called a 'country of samples.' In a sense this is true. That is to say, it is difficult to fill a large order on short notice. Even a carload of a particular quality of cacao or coffee is not always easy to secure, and a uniform quality of goods can best be obtained by frequent shipments of small lots. Plantation cacao of extra good quality is shipped for the most part by the planters direct to England, where for some reason a better price is obtainable than in the United States. There seems to be no reason why Canadian firms should not make direct connections with planters, who could supply regularly a really high-grade article.

Good Jamaica Coffee.

"Jamaica Blue Mountain coffee brings the highest price of any coffee, and is possibly too high-priced for the Canadian market, but there is a great deal of excellent coffee grown in the hills of Jamaica other than Blue Mountain, which is not much inferior in quality and is a great deal lower in price, and which should be used very profitably in Canada. Care must be exercised, however, to see that this is not mixed with lowland coffee of an inferior quality, which is too often done.

"On the whole there seems to be an excellent opportunity just now for Canada to supply forty or fifty per cent., instead of nine per cent., of Jamaica imports, and to reciprocate by using twenty or thirty per cent., instead of five per cent., of Jamaica produce."

BANK OF COMMERCE STATEMENT.

The annual report of the Canadian Bank of Commerce has become an economic classic. The preliminary statement was commented upon in our January issue and we now merely direct the attention of our readers to the detailed statement which appears in this issue. The "Review of Business Conditions During the Year 1914," which is compiled by the assistant managers of the bank, contains a wealth of valuable information collected first hand, and will well repay extensive perusal.

MANUFACTURED ARTICLES IMPORTED BY CANADIANS FROM THE UNITED STATES

NOTE.—The following list of the principal manufactured articles which Canadians bought from United States manufacturers during the year ending March 31st, 1914, shows what immense sums of money are sent to the United States for articles the majority of which are made in Canadian factories. Canadian consumers, including manufacturers, should carefully scrutinize these articles with a view to purchasing them at home. Keep this list and if you have occasion to buy any of the articles enumerated ask if they are made in Canada—and, if they are, give Canadian goods the preference. We must follow the example of the United States and build up our national industries.

Principal Articles.	Value of Imports.
Ale, beer and porter	$ 885,207
Ale, ginger	1,767
Artificial limbs and parts thereof	40,621
Artificial teeth, not mounted	162,636
Asphaltum or asphalt	635,278
Bagatelle and other game tables or boards	7,042
Bags which contained cement, etc.	62,448
Bags, barrels and other coverings used in the importation of salt	17,593
Baking powder	206,390
Balls, cues and racks and cue tips for bagatelle boards and billiard tables	19,036
Baskets of all kinds, n.o.p.	68,040
Baths, bath tubs, basins, closets, lavatories, urinals, sinks and laundry tubs of any material	288,714
Bells for use of churches	26,326
Bells and gongs, n.o.p.	48,538
Billiard tables	35,911
Blacking, shoe and shoemakers' ink; shoe, harness and leather dressing, n.o.p.	101,836
Blueing laundry	5,237
Boats, open, pleasure, sail-boats, skiffs and canoes	31,038
Bones, crude	13,813
Books, periodicals, etc.—	
Bank notes, bonds, bills of exchange, cheques, promissory notes, drafts and all similar work, unsigned, and cards or other commercial blank forms printed or lithographed, or printed from steel or copper, or other plates, and other printed matter, n.o.p.	$244,602
Bibles, prayer books, psalm and hymn books, religious tracts and Sunday-school lesson pictures	107,175
Labels for cigar boxes, fruits, vegetables, meats, fish, confectionery and other goods and wares; also shipping, price or other tags, tickets or labels; and railroad or other tickets whether lithographed or printed or partly printed, n.o.p.	283,117
Newspapers and quarterly, monthly and semi-monthly magazines, and weekly literary papers, unbound	1,212,194
Pamphlets, advertising, pictorial show cards, illustrated advertising periodicals, illustrated price books, catalogues and price lists; advertising calendars and almanacs; patent medicine or other advertising circulars, fly sheets or pamphlets	712,628
Printed music, bound or in sheets, and music for mechanical players	253,488
Other books, periodicals, etc.	2,153,499
Total books, periodicals, etc.	$4,966,703
Boots and shoes and slippers of all kinds except rubber and leather	$60,039
Braces or suspenders and finished parts of	67,248
Grain products—	
Bran, mill-feed, etc.	$19,549
Buckwheat meal and flour	8,296
Cornmeal	168,803
Hominy, cracked, evaporated or dried corn	22,044
Malt, whole, crushed or ground	192,547
Rye flour	28,848
Wheat flour	239,461
Other grain products	1,062
Total grain products	$680,610
Breadstuffs—	
Biscuits, all kinds	$49,327
Bread, passover	61,857
Cereal food	317,470
Macaroni and vermicelli	31,148
Rice	91,245
Rice and sago flour	14,785
Tapioca flour	16,911
Other breadstuffs, n.e.s.	84,638
Total	$667,381
Bricks, clays and tiles—	
Building blocks, partition hollow and fireproof building tile	$375,796
Building bricks	49,596
China clay	96,251
Fire bricks	890,146
Fire clay	100,676
Paving bricks	98,471
Drain pipes, sewer pipes and earthenware fittings therefor, chimney linings, or vents, chimney tops and inverted blocks, glazed or unglazed	399,830
Other bricks, clays and tiles	243,660
Total bricks, clays and tiles	$2,704,426
Bristles	$59,391
British gum, sizing cream and enamel sizing	43,160
Broomcorn	323,445
Brooms and whisks	23,347
Brushes of all kinds	272,282
Buttons and materials for	465,021
Candles	71,242
Carpet-sweepers	23,633
Carpets, mats and rugs (not jute or woollen)	40,508

Carriages, carts, cars, wagons, etc.—	
Automobiles and motor vehicles	$6,528,086
Automobile and motor vehicle parts	3,926,077
Bicycles and tricycles	30,567
Bicycle and tricycle parts	26,833
Cars, railway,—	
Box and flat	3,972,846
Passenger	2,067,291
Tram or horse	36,710
Other	850,313
Parts of	416,925
Carriages, buggies, pleasure carts and vehicles.	99,558
Children's carriages and sleds	402,544
Farm and freight wagons	417,498
Scrapers, railway or road	114,830
Wheelbarrows, trucks and hand carts	119,844
Other carriages, etc., and parts of	156,970
Total carriages, etc.	$19,166,892
Cash registers	$210,260
Celluloid, xylonite or xyolite, in sheets, lumps, blocks, rods or bars, not further manufactured than moulded or pressed	104,435
Celluloid, other, and mfrs. of	48,757
Cement	274,555
Clocks, time recorders, clock and watch keys, clock movements	462,895
Cloth, coated or sized, for manufacture of sensitized blue or black print cloth	7,980
Clothes wringers and parts thereof for domestic use	33,999
Coal, coke, etc.—	
Anthracite coal and dust	$20,584,198
Bituminous coal	26,064,157
Charcoal	85,967
Coke	2,072,275
Total coal, coke, etc.	$48,806,597
Cocoa beans, not roasted crushed or ground	$524,618
Cocoa and chocolate, mfrs. and preparations of	216,415
Cocoanuts	7,661
Coffee and imitations of	268,011
Collars and cuffs	96,845
Combs	35,892
Communion sets of metal, glass or wood	11,981
Cordage, rope and twine—	
Binder twine	$3,779,434
Binder twine, articles for the manufacture of	12,354
Cordage, cotton of all kinds	17,468
Twine, manufactures of, viz.: Hammocks and lawn tennis nets, sportsman's fish nets and other articles, n.o.p.	42,180
Other cordage, rope and twine	175,873
Total cordage, rope and twine	$4,027,309
Corsets	$642,393
Corset clasps, busks, blanks and steels, and covered corset wires cut to length, tipped or untipped; reed, rattan and horn, covered	8,200
Costumes and scenery, theatrical	6,383
Cotton and manufactures of—	
Bags, seamless	$20,804
Bags, made up with the needle	78,544
Batts, batting and sheet-wadding	33,713
Clothing—	
Blouses and shirt waists	11,773
Shirts	444,092
Socks and stockings	168,718
Undershirts and drawers	75,684
Other cotton clothing	1,851,109
Embroideries, white and cream-colored	42,248
Fabrics—	
Belting of all kinds	185,045
Bookbinders' cloth	39,084
Duck, cotton or linen, seamless, in circular form, for the manufacture of hose pipe	78,782
Duck, grey or white, n.o.p., weighing over 8 oz. per sq. yd.	576,444
Grey, unbleached	201,945
Jeans, coutilles and sateens for corset making	57,642
Printed, dyed or colored	1,600,314
Velveteens and plush	51,345
White or bleached	701,662
Lace, white and cream-colored	52,771
Lamp-wick	20,630
Raw cotton or cotton wool	9,752,437
Sheets, bed quilts, pillow cases and damask in the piece, including uncolored tablecloths or napkins	88,859
Tape	29,546
Thread	271,473
Towels	21,344
Yarns	244,269
Other cottons	746,007
Total cottons	$17,596,234
Crucibles, clay, sand or plumbago	$49,492
Curtains and shams	102,849
Cyclometers and pedometers	69,952
Drugs, dyes, chemicals and medicines—	
Acids	$241,898
Albumen, blood and egg, and egg yolk	35,794
Alum in bulk, ground or unground, but not calcined, and sulphate of alumina, or alum cake	122,241
Ammonia, nitrate of	17,982
Aniline and coal tar dyes, soluble in water, in packages of not less than 1 lb. weight, including alizarine and artificial alizarine	174,531
Annatto, liquid or solid	8,068
Bacteriological serums for subcutaneous injection	87,696
Beans, vanilla, crude	90,189
Borax in bulk of not less than 25 lbs.	15,567
Brimstone, crude, or in roll or flour, and sulphur in roll or flour	541,287
Chloride of lime and hypochlorite of lime in packages of not less than 25 pounds	77,017
Cream of tartar in crystals	56,231
Cyanide of potassium, cyanide of sodium, cyanogen or compound of bromine and potassium for reducing metals in mining operations	142,997
Dextrine, dry	65,752
Dyeing or tanning articles in a crude state used in dyeing or tanning, n.o.p.	113,299

Flowers, leaves and roots, medicinal	$24,462
Gelatine and isinglass	50,371
Glycerine	249,188
Gums, viz.:—	
Amber, Arabic, Australian, copal, damar, elemy, kaurie, mastic, sandaric, senegal, tragacanth, gedda, barberry, pontianac and lac, crude, seed, button, stick, and shell	429,153
Chicle or sappato gum, crude	580,547
Other gums	7,360
Liquid preparations, non-alcoholic, for disinfecting, dipping or spraying	59,850
Liquorice, in paste, rolls and sticks, not sweetened	62,290
Logwood, fustic, oak, oak bark quebracho, extract of	826,109
Malt, extract of, fluid or not, including grain molasses	49,295
Manganese, oxide of	24,051
Medicinal, chemical and pharmaceutical preparations, including proprietary preparations	615,582
Potash or potassa—	
Caustic	23,623
Chlorate of, not further prepared than ground	55,531
Muriate and sulphate of	180,765
Nitrate of or saltpetre	51,556
Proxylin and wood naphtha, preparations of, for coating imitation leather	13,064
Quicksilver	49,904
Quinine, salts of	22,318
Soda—	
Bicarbonate of	19,236
Bichromate of	10,483
Caustic	183,782
Nitrate of or cubic nitre	826,277
Nitrate of	23,117
Sal	32,720
Silicate of in crystal or in solution	75,713
Soda ash or barilla	230,438
Sulphate of crude (salt-cake)	101,050
Sodium, sulphide of	16,245
Spirits and strong waters of any kind, mixed with any ingredient or ingredients, and being known or designated as anodynes, elixirs, essences, extracts, lotions, tinctures or medicines, or ethereal and spirituous fruit essences, n.o.p.	33,881
Sulphate of copper (blue vitriol)	27,952
Sulphuric ether, chloroform and solutions of peroxide of hydrogen	34,711
Surgical dressings, antiseptic, such as absorbent cotton, cotton wool, lint, lambs' wool, tow, jute, gauzes and oakum, prepared for use as surgical dressings, plain or medicated	162,214
Terra japonica, gambier or cutch	73,212
Vaseline and similar preparations of petroleum	24,931
Zinc dust	19,946
All other drugs, dyes, chemicals, etc.	836,489
Total drugs, dyes, etc.	$7,927,965

Earthenware—	
Brown or colored earthen and stone ware, and Rockingham ware	$51,585
China and porcelain ware, n.o.p.	11,592
C. C. or cream-colored ware, decorated, printed or sponged, and all earthenware, n.o.p.	46,444
Demijohns, churns or crocks	27,993
Tableware of china, porcelain, white granite or iron-stone ware	$40,871
Tiles or blocks of earthenware or stone prepared for mosaic flooring	125,409
Tiles, earthenware, n.o.p.	124,464
Other earthenware	142,954
Total earthenware	$571,312
Elastic, round or flat	$29,253
Electric apparatus—	
Carbons, electric light and carbon points of all kinds, n.o.p.	39,333
Carbons over six inches in circumference	299,400
Electric apparatus, n.o.p., insulators of all kinds and sockets, etc., electric and galvanic batteries, telephone and telegraph instruments	5,514,765
Electric motors, generators, and dynamos	1,541,662
Incandescent lamp bulbs and glass tubing for use in the manufacture of incandescent lamps and mantle stocking for gas light	110,084
Total electric apparatus	$7,505,244
Embroideries, n.o.p.	$29,237
Emery, in bulk, crushed or ground	36,897
Emery and carborundum wheels and manufactures of emery and carborundum	123,729
Fancy goods—	
Alabaster, spar, amber, terra cotta, or composition ornaments	25,768
Bead ornaments	4,963
Boxes, fancy ornamental cases and writing desks, etc.	123,985
Braids, cords, fringes, tassels, n.o.p.	167,766
Cases for jewellery, watches, silverware, plated-ware and cutlery	24,224
Feathers, fruits, grains, leaves and flowers, artificial, suitable for ornamenting hats	158,348
Feathers, fancy, n.o.p.	167,208
Lace, lace collars and similar goods, etc.	100,261
Statues and statuettes of any material	29,195
Toys and dolls of all kinds	293,853
Other fancy goods	32,155
Total fancy goods	$1,127,726
Fashion plates, tailors', milliners' and mantle-makers'	$99,772
Feathers, bed and other	40,032
Fertilizers	764,779
Fisheries, articles for use in	709,111
Flax, hemp, jute and mfrs. of—	
Bags or sacks	$87,695
Fabrics—	
Jute canvas, uncolored	48,844
Jute cloth, as taken from the loom, not colored, cropped, mangled, pressed, calendered, nor finished in any way	164,433
Unbleached fabrics	25,529
Hemp, dressed or undressed	351,336
Jute batts and jute	28,525
Yarns	40,746
Other flax, hemp, jute, etc.	94,770
Total flax, etc.	$841,878

Furs and skins and mfrs. of—	
Astrachan or Russian hare skins and China goat plates or rugs wholly or partly dressed but not dyed	$17,880
Fur skins, wholly or partially dressed, n.o.p.	148,503
Fur tails in the raw state	6,869
Fur skins of all kinds, not dressed in any manner, n.o.p.	1,388,415
Hats, caps, muffs, tippets, capes, coats, cloaks and other mfrs. of fur, n.o.p.	215,209
Total furs and skins and mfrs. of	$1,776,876
Glass and mfrs. of—	
Common and colorless window glass	$417,417
Glass balls, and cut, pressed or moulded crystal glass tableware, blown glass tableware, and other cut glass ware	428,501
Glass carboys or demijohns, bottles, decanters, flasks, jars, and phials	403,856
Glass in sheets and bent plate glass, n.o.p.	80,660
Lamp chimneys, shades or globes	303,843
Plain, colored, opaque, stained or tinted or muffled glass in sheets	38,007
Plate glass	62,786
Other glass	309,717
Silvered glass	49,672
Total glass and mfrs. of	$2,094,459
Gloves and mitts	$323,964
Glue, glue stock and mucilage	136,533
Grasses, fibres and mfrs. of—	
Fibre, kartavert, indurated fibre, vulcanized fibre and like material, and manufactures of, n.o.p.	$154,443
Manilla grass	1,108,141
Other grasses, etc.	115,188
Total grasses, fibres, etc.	$1,377,772
Grease	$1,045,198
Gunpowder and explosives—	
Giant powder, nitro, nitro-glycerine and other explosives, n.o.p.	$52,856
Gun, rifle, sporting and canister powder	82,585
Gun, rifle and pistol cartridges or other ammunition, n.o.p.	490,101
Other gunpowder, etc	76,881
Total gunpowder, etc	$702,423
Gutta percha, India rubber and mfrs. of—	
Belting	$84,234
Boots and shoes	124,889
Clothing and clothing made waterproof with India rubber	67,804
Hose	137,298
Packing, mats and matting	91,860
Rubber and gutta percha, crude caoutchouc or India rubber unmanufactured	2,631,112
Rubber, powdered, and rubber or gutta percha waste or junk	101,980
Rubber, recovered, rubber substitute, and hard rubber in sheets	869,666
Rubber thread, not covered	$28,286
Tires of rubber for vehicles of all kinds	1,216,552
Other gutta percha, etc.	783,441
Total gutta percha, etc.	$6,137,122
Hair and mfrs. of	$249,990
Hats, caps, bonnets and materials for—	
Beaver, silk or felt hats	$662,610
Braids or plaits of chip, palm leaf, Manilla, willow, osier, rattan, straw, Tuscan or grass, for making or ornamenting hats and plait braids or plaits of glazed cotton thread, not over ¼ inch wide, for the mfr. of hat bodies	114,884
Buckram for the manufacture of hat and bonnet shapes	22,965
Hatters' bands (not cords), bindings and hat sweats; hatters' tips and sides when cut to shape, and cashmere when cut to shape for under brims and hat covers, for the manufacture of hats	68,454
Hat, cap and bonnet shapes, and hat and bonnet crowns	63,891
Hats, caps, etc., of straw, grass, chip or other material, n.o.p.	1,164,072
Hatters' furs, not on the skin	56,832
Other hats, caps, etc., and materials for	8,462
Total hats, caps, etc.	$2,162,170
Hides and skins	2,120,558
Ink, writing and printing	114,289
Jewellery	1,001,258
Laces, boot, shoe, shirt and stay	35,959
Leather and mfrs. of—	
Belting leather of all kinds	21,528
Calf, kid or goat, lamb and sheep skins, tanned	80,818
Calf, kid or goat, lamb and sheep skins, dressed, waxed or glazed	458,622
Glove leather, tanned or dressed, colored or uncolored, for use in the manufacture of gloves	638,939
Harness leather	9,073
Japanned, patent or enamelled leather and Morocco leather, and leather in imitation of Morocco leather	32,217
Skins for Morocco leather, tanned but not further manufactured	14,996
Sole leather	31,537
Tanners' scrap leather	12,849
Upper leather, not dressed, waxed or glazed	23,891
Upper leather, including dongola, cordovan, kangaroo, alligator and all leather, dressed, waxed or glazed, or further finished than tanned, n.o.p., and chamois skins	370,633
Other leather and skins, n.o.p.	133,196
Other leather, dressed, waxed or glazed, etc., n.o.p.	320,040
Manufactures of leather—	
Belting	122,256
Boots and shoes, slippers and insoles of leather, n.o.p.	3,616,112
Boots and shoes, pegged or wire fastened, with unstitched soles, close edged	36,550
Harness and saddlery, including horse boots.	109,559

Other manufactures of leather and raw hide, n.o.p.	$614,386
Total leather and mfrs. of	$6,647,202
Lime	$235,557
Lime juice, etc.	112,624
Magic lanterns and slides, moving picture machines	1,164,174
Marble and mfrs. of—	
Marble, sawn or sand rubbed, not polished	$195,539
Rough, not hammered or chiselled	101,516
Other marble and mfrs. of	165,844
Total marble and mfrs. of	$462,719
Metals and minerals and mfrs. of—	
Brass and mfrs. of—	
Bars or rods not less than 6 feet in length, and brass in strips, sheets or plates, not polished, etc.	$756,063
Blocks, ingots or pigs	232,831
Cups, being rough blanks for the manufacture of paper shells or cartridges	102,053
Glove fasteners of metal, shoe eyelets, corset eyelets, shoe eyelet hooks, shoe lace wire fasteners	184,562
Old and scrap	291,667
Pumps	18,969
Tubing, not polished, bent or otherwise manufactured, in lengths not less than 6 feet	313,836
Wire cloth, woven wire of brass, n.o.p.	67,846
Wire, plain	68,752
Other brass and mfrs. of	1,753,690
Total brass and mfrs. of	$3,790,269
Copper and mfrs of—	
Bars and rods in coils or otherwise in lengths not less than 6 feet, unmanufactured	4,333,471
Blocks, pigs or ingots	778,094
Old and scrap	62,045
Rollers for use in calico printing	18,853
Strips, sheets or plates, not planished, or coated, etc.	718,956
Tubing in lengths not less than 6 feet and not polished, bent or otherwise manufactured.	120,940
Wire, plain, tinned or plated	115,183
Other copper and mfrs. of	263,206
Total copper and mfrs. of	$6,410,748
Gold and silver and mfrs. of—	
Electro-plated ware and gilt ware, n.o.p.	$185,566
Gold, silver and aluminium leaf and Dutch or schlag metal leaf	23,966
Sterling or other silverware	111,862
Other gold and silver, etc.	17,651
Total gold and silver, etc.	$339,045
Iron and steel and mfrs. of—	
Agricultural implements—	
Binding attachments	$34,539
Cultivators, weeders and parts of	57,079
Drills, seed	99,441
Farm, road or field rollers	114,135
Harrows and parts of	$156,434
Harvesters, self-binding	336,675
Horse rakes	41,234
Lawn mowers	64,449
Manure spreaders	42,035
Mowing machines	47,857
Ploughs and parts of	1,011,557
Potato diggers	47,217
Reapers	38,300
Other agricultural implements	153,115
Parts of agricultural implements	954,196
Total agricultural implements	$3,198,263
Angles, beams, channels, and other rolled shapes not punched, drilled or further manufactured than rolled, weighing not less than 35 lbs. per lineal yard, not being square, flat, oval or round shapes, and not being railway bars or rails	$4,924,971
Angles, beams, channels, girders, tees and other rolled shapes or sections, not punched, drilled or further manufactured than rolled, n.o.p.	2,492,458
Anvils and vises	43,531
Axle and axle parts, n.o.p., and axle blanks and parts thereof of iron or steel, for railway, tramway, or other vehicles	302,780
Bars, bands, hoops, scroll or strip, sheet or plate, rolled or cast steel of any size, thickness or width, galvanized or coated with any material or not, and steel blanks for the manufacture of milling cutters, when of greater value than 3½ cts. per lb	1,065,807
Bar iron or steel, rolled, whether in coils, bundles, rods or bars, comprising rounds, ovals, squares and flats, n.o.p.	3,093,901
Bars or sheets of steel for the manufacture of shovels	67,993
Billets of iron or steel	674,472
Bridges or parts thereof, structural work, columns, shapes or sections, drilled, punched, or in any further state of manufacture, than as rolled or cast, n.o.p.	914,655
Butts and hinges	136,006
Castings	1,311,343
Cast scrap iron	481,500
Chains	499,710
Cream separators and steel bowls for	303,439
Cream separators, materials for	254,781
Cutlery	246,481
Engines, etc.—	
Boilers, steam and parts of	273,083
Boilers, other, and parts of	262,197
Fire engines	70,292
Gasoline and gas engines	2,456,507
Locomotives for railways	615,468
Motor cars for railways and tramways	71,976
Steam engines	386,444
Steam pumps	304,495
Ferro-silicon, spiegeleisen and ferro-manganese	98,707
Fire extinguishing machines including sprinklers for fire protection	114,416
Forgings of iron or steel of whatever shape or size or in whatever stage of manufacture, n.o.p.; and steel shafting, turned, compressed, or polished, and hammered, drawn or cold rolled iron or steel bars or shapes, n.o.p.	188,105

Guns, rifles, including air guns and air rifles (not being toys), muskets, cannons, pistols, revolvers or other firearms	$611,249
Hardware, viz.: builders', cabinet-makers', upholsterers', harnessmakers', saddlers', and carriage hardware, including curry-combs, n.o.p.	704,118
Hoop, band, scroll or strip	792,198
Locks of all kinds	436,670
Machinery—	
Adding	366,282
Carding, spinning, weaving or braiding machinery, or machinery for knitting fibrous material, of a class or kind not made in Canada	1,156,809
Cement making	181,907
Coal handling	167,364
Concrete mixing	110,339
Cranes and derricks	782,187
Engines, portable, with boilers in combination, and traction engines, for farm purposes	2,293,649
Gold mining, alluvial, machinery and appliances for, of a class or kind not made in Canada	225,085
Hay presses	48,326
Mining, smelting and reducing machinery, for use exclusively in mining or metallurgical operations n.o.p.	941,675
Ore crushers and rock crushers, stamp mills, Cornish and belted rolls, rock drills, air compressors, cranes, derricks and percussion coal cutters	481,194
Paper and pulp mill machines	423,707
Printing and lithographic presses and accessories for	902,103
Rolling mill machines	175,721
Ruling, folding, binding, embossing, creasing or cutting machinery when for use exclusively by printers, bookbinders and by manufacturers of articles made from paper or cardboard, including parts thereof	336,853
Saw-mill machines	228,825
Sewing machines and parts of	450,033
Shovels, steam and electric	576,402
Threshing machine separators and parts of	1,390,158
Type-casting and typesetting machines, and parts thereof, adapted for use in printing offices	758,735
Typewriting machines	721,259
Washing machines, domestic	83,122
Windmills and parts of	48,930
Other machinery	13,042,596
Total machinery	$ 25,893,261
Nails, brads, spikes and tacks	$ 131,644
Needles	63,723
Nuts of wrought iron or steel and washers, iron or steel rivets, bolts with or without threads, nut and bolt blanks, T and strap hinges and hinge blanks, n.o.p.	258,373
Ore, iron	3,160,664
Pig-iron	2,341,407
Pipe, cast-iron	570,904
Pipe fittings	997,282
Plates, rolled, not less than 30 inches wide and one-fourth inch thick	2,172,833
Plates or sheets, sheared or unsheared, and skelp iron or steel sheared or rolled in grooves, etc.	$1,134,427
Plate, steel, universal mill or rolled edge plates, over 12 inches wide, for the manufacture of bridges or of structural work or for car construction	1,466,622
Plough plates or shares, or mould boards, land sides and other plates for agricultural implements, cut to shape from rolled plates of steel, but not moulded, punched, polished or otherwise manufactured	227,194
Pumps, hand	88,560
Rails for railways and tramways	4,901,851
Railway fish and tie plates	234,634
Railway spikes	170,786
Railway switches, frogs, crossings, etc.	274,093
Safes and doors for safes and vaults	167,397
Scales, balances, weighing beams and strength-testing machines	144,454
Scrap, wrought, being waste or refuse, including punchings, cuttings and clippings of iron or steel plates or sheets, having been in actual use; crop ends of tin plate bars, blooms and rails, the same not having been in actual use	595,222
Screws, iron and steel, commonly called wood screws, n.o.p., including lag or coach screws, plated or not, and machine or other screws, n.o.p.	78,733
Shafting, round, steel, in bars not exceeding 2½ inches in diameter	149,431
Sheets: Canada plates; Russia iron, terne plate and rolled sheets of iron or steel, coated with zinc, spelter or other metal, of all widths or thickness, n.o.p.	486,254
Sheets, flat, galvanized	1,018,536
Sheets, polished or not, No. 14 guage and thinner, n.o.p.	1,872,338
Ships or vessels,—Angles, beams, knees, masts, plates, sheets or parts thereof, and cable chains for	544,847
Ships and vessels of iron or steel, manufactured articles of iron or steel or brass, for use in the construction of, being of a class or kind not manufactured in Canada	102,426
Skates, of all kinds, roller or other, and parts thereof	40,719
Skelp sheared or rolled in grooves for the manufacture of wrought iron or steel pipe.	2,741,979
Springs, n.o.p., and parts thereof, of iron or steel, for railway, tramway, or other vehicles	127,763
Steel for saws and straw cutters cut to shape but not further manufactured	168,634
Stoves of all kinds, for coal, wood, oil, spirits or gas	819,740
Surgical and dental instruments and surgical needles; surgical operating tables for use in hospitals, X-ray apparatus and parts thereof, and microscopes valued at not less than $50 each by retail	435,330
Tires, locomotive and car wheel, of steel, in the rough	135,401
Tools and implements	1,088,380
Tubing—	
Boiler tubes, including flues and corrugated tubes for marine boilers	473,209

Plain or galvanized tubing or pipe, riveted or corrugated, etc., and lock-joint pipe	$547,573
Wrought or seamless iron or steel tubing, plain or galvanized	981,890
Other tubing	281,891
Ware, agate, granite or enamelled; plain or coated iron hollow-ware; aluminium ware, etc.	361,064
Wire—	
Barbed fencing	503,201
Galvanized, 9, 12 and 13 gauge	1,219,510
Single or several, covered, including cable	563,448
Other wire	666,531
Wire rods, rolled, round, in the coil not over ⅜ in. in diameter, for making wire in the coil	1,464,366
Other iron and steel	9,428,817
Total iron and steel	$ 98,695,448
Lead and manufactures of	$ 179,581
Tin and manufactures of—	
Blocks, pigs and bars	866,014
Plates and sheets	2,859,061
Other tin	683,858
Zinc and manufactures of—	
Blocks, pigs, bars, etc.	72,788
Spelter	330,497
Manufactures of zinc	46,260
Miscellaneous metals, etc.—	
Alumina	$ 600,454
Aluminium in ingots, blocks or bars, strips, sheets or plates	395,844
Aluminium, manufactures of, n.o.p.	111,029
Asbestos in any form other than crude and all manufactures of	415,338
Buckles of iron, steel, brass or copper of all kinds, n.o.p. (not being jewellery)	126,788
Gas, coal or other oil and electric light fixtures or parts thereof of metal, including lava or other tips, burners, collars, galleries, shades and shade-holders	637,185
Gas mantels and incandescent gas burners	87,467
Gas meters and finished parts of	57,198
German, Nevada and nickel silver, manufactures of, not plated	60,826
Lamps, side-lights and headlights, lanterns and chandeliers	873,125
Nickel, nickel silver and German silver in ingots, blocks, bars, rods, strips, sheets, plates	135,858
Nickel-plated ware	1,233,805
Ores of metals, n.o.p.	982,890
Stereotypes and electrotypes of all sorts, and accessories therefor	149,195
Type for printing, including chases, quoins and slugs of all kinds	103,156
Other miscellaneous metals, etc.	1,007,354
Total miscellaneous metals, etc.	$ 6,977,512
Total metals, minerals and mfrs. of	$ 121,251,081
Milk food and similar preparations	$ 172,961
Mineral and aerated waters	49,591
Musical instruments—	
Phonographs, graphophones, gramophones and finished parts thereof, including cylinders and records therefor	868,920
Pianos	$380,647
Pianos, parts of	275,411
Other musical instruments	265,406
Oilcake and oilcake meal	132,874
Oilcloth	472,594
Oils—	
Coal and kerosene, distilled, purified or refined	$ 1,350,502
Cocoanut, palm and palm kernel	164,911
Cotton-seed	1,512,200
Crude petroleum, fuel and gas oils	5,999,221
Essential oils	263,268
Gasoline	4,466,986
Lubricating	1,041,395
Rosin and chinawood oil	205,165
Other oils	954,792
Total oils	$ 15,958,440
Optical, philosophical, etc., instruments	$ 918,568
Paintings	956,842
Paints and colors	1,032,360
Paper and mfrs. of—	
Albumenized and other papers and films chemically prepared for photographers' use	104,162
Cardboard not pasted or coated	78,913
Cards or playing	76,564
Envelopes	98,113
Millboard, not coated or pasted	103,577
Paper, photographic, plain, basic, baryta coated, adapted for the manufacture of albumenized or sensitized paper	90,151
Printing paper	483,947
Ruled, bordered, coated and boxed papers	180,056
Strawboard, not pasted or coated	98,131
Tarred and other building paper	509,086
Wall paper	324,760
Wrapping paper	119,901
Other paper and mfrs. of	3,155,676
Total paper and mfrs. of	$ 5,423,037
Pencils, lead	$ 203,553
Pens, penholders and rulers	105,857
Perfumery	465,567
Pickles, sauces and soy	194,061
Picture and photograph frames	123,538
Plants and trees	415,397
Plates, engraved on wood, steel or other metal and transfer, taken from the same, engravers' plates of steel or other metal polished for engraving thereon	55,830
Pocket books, portfolios, purses, reticules, satchels, card cases, fly books and musical instrument cases	366,058
Polish or composition, knife and other, n.o.p.	113,888
Precious stones	180,807
Provisions—	
Butter	$ 73,419
Cheese	68,733
Lard	743,173
Meats—	
Bacon and hams	1,171,691
Beef, salted	52,271
Canned meats	105,479
Dried or smoked meats	221,467
Extracts of meat	282,297

Pork, barrelled	$1,178,494
Other meats	300,448
Pulleys, belt	$ 98,003
Regalia and badges	48,990
Rennett	32,507
Resin or rosin	541,329
Ribbons	164,437
Sand and emery paper and cloth	159,677
Salt	221,550
Sausage casings	84,604
Ships, ship boilers, engines, machinery, etc.	1,080,751
Signs, etc., not paper	138,195
Silk and mfrs. of—	
Clothing—	
Socks and stockings	$ 211,733
Other	408,813
Fabrics	381,139
Raw, or reeled from cocoon	291,604
Sewing, embroidery, twist, floss, etc.	98,714
Other silk and mfrs. of	153,083
Total silk and mfrs. of	$ 1,545,086
Slate and mfrs. of	$ 211,836
Soap	1,008,609
Spices	83,510
Spirits and wines	152,780
Sponges of marine production	77,992
Starch	68,952
Stockinette for mfr. of rubber boots and shoes	43,670
Stone and mfrs. of—	
Chalk, prepared	$ 42,419
Chalk, china or Cornwall stone, cliff stone, and felspar, fluorspar, magnesite, ground or unground	149,963
Flagstone, granite, rough, sandstone and all building stone, not hammered, sawn or chiselled	91,962
Flagstone, and all other building stone, sawn or dressed	465,509
Grindstones	97,422
Gypsum, calcined or not, and wall plaster	133,707
Other stone and mfrs. of	295,352
Total stone and mfrs. of	$ 1,666,822
Sugar, molasses, etc	$ 893,926
Tar, coal, and coal pitch	189,358
Tea	38,648
Teeth, artificial, not mounted	162,636
Tobacco—	
Manufactured	347,588
Tobacco pipes of all kinds, pipe mounts, cigar and cigarette holders, and cases for same, smokers' sets and cases therefor and tobacco pouches	65,667
Trunks, valises, hat boxes, carpet bags, and tool bags	113,590
Trusses, surgical, pessaries and suspensory bandages	49,321
Turpentine, spirits of	454,670
Umbrellas, parasols and sunshades, of all kinds and materials	18,776
Varnishes and lacquers	118,479
Waste or shoddy from cotton, woollen or other fabrics or from yarn or thread, machined, garnetted or prepared for use	$ 225,008
Watches and parts of	$880,183
Wax of all kinds	234,835
Webbing	189,883
Wood—	
Barrels	$ 273,680
Cane, reed or rattan	70,260
Caskets and coffins and metal parts of	59,214
Cork wood and bark and mfrs. of	276,151
Doors	476,193
Felloes of hickory or oak, not further manufactured than rough sawn or bent to shape	79,861
Fence posts and railway ties	2,326,843
Fuel wood	89,936
Furniture	2,660,071
Handle, heading, stave and shingle bolts	219,032
Handles—	
Ash	32,763
D shovel	71,044
Hickory	72,091
Hickory billets	69,995
Hickory and oak spokes, not further manufactured than rough turned, and not tenoned, mitred or sized	231,328
Hub, last, wagon, oar and gun blocks, and all like blocks or sticks, rough hewn or sawed only, and scale board for cheese boxes	74,893
Ivory nuts (vegetable)	70,222
Lasts of wood	85,698
Logs and round timber	648,200
Lumber, timber, planks and boards—	
African teak, amaranth, black heart, ebony, boxood, cocoboral, dogwood, lignum vitæ, persimmon, red cedar and satin-wood	26,235
Cherry, chestnut, gumwood, hickory and whitewood	774,658
Laths	82,308
Mahogany	282,487
Oak	2,629,788
Pitch pine	2,912,363
Sawed, split or cut boards, planks and other lumber, when not further manufactured than dressed on one side only	4,423,245
Sawed boards, planks, deals, planed or dressed on one side or both sides, when the edges thereof are jointed or tongued and grooved	508,126
Shingles	102,622
Spanish cedar	74,548
Staves of oak, sawn, split or cut, not further manufactured than listed or jointed	181,624
Timber, hewn or sawed, squared or sided or creosoted	521,825
Walnut	28,691
White ash	119,552
Matches	47,255
Mouldings	154,427
Refrigerators	55,256
Show cases and parts of	50,289
Veneers	284,497
Window sash	71,239
Wood pulp	233,806
All other wood and mfrs. of	1,949,574
Total wood and mfrs. of	$ 23,401,890
Wool and mfrs. of—	
Carpets, mats and rugs	$ 74,902
Clothing	$2,027,840
Total wool and mfrs. of	$2,102,742
Yeast	$426,429

DEFECTS IN ONTARIO COMPENSATION ACT

Many Contradictions, Errors and Discriminations in the Faulty Ontario Workmen's Compensation Act are not being Removed by Administration. Heavy Toll upon Employers

THE attention of the Ontario Members of the Canadian Manufacturers Association has, during the past few weeks, been rather forcibly drawn to this subject by the assessments which the Ontario Workmen's Compensation Board have levied, and the truth of the criticisms which were made at the time the Act was going through the Legislature, and the expectations of difficulty then expressed, have already been revealed in a sufficiently remarkable manner. In the items below will be found in developed form some of the faults which were pointed out when the measure was in its formulative stages. Others will, unless amendments are made, develop as the Act becomes more fully operative.

Arbitrary Powers of the Board.

In the course of the passage of the Bill through the House strong objection was taken to the vagueness of the terms and principles laid down in the Act. When this objection was placed before the Ontario Cabinet it was met by the answer that this and similar matters would be readily adjusted by the Board of experienced and practical men which the Government intended to appoint, and in whom an unusual amount of discretionary power was to be vested. To this evasion of the issue it was replied that it was the duty of the law makers to set out as far as possible the principles and general plan on which the Act was to be administered, that the necessary difficulty of the Board's task would be materially increased by failure to supply it with workable machinery, and that if the Government left to the Board the formulation of its own principles the principles adopted might be incorrect and incompatible with the plan proposed by the Canadian Manufacturers Association and approved of by the Government. The Government's definite undertaking that these matters would be satisfactorily adjusted by the Board was, for want of a better assurance, accepted. Subsequent events have more than justified the pessimism of those who were at that time familiar with the inherent defects of the Act. Following upon its appointment the Board at once set about preparing the necessary machinery to make the Act workable. In accomplishing this, certain provisions of the Act had to be ignored, other provisions had to be stretched to the point of breaking, and still others that were not in the Act had to be read into it. The net result has been the adoption of policies and methods which tend to prejudice the industries of the Province at a time when it is of the utmost importance to husband every available resource.

Current Cost Plan.

It will be remembered that objection was made on behalf of the Canadian Manufacturers Association at the time the Act was going through the Legislature, that the provisions as to reserves were such as to prevent, or at all events, discourage, the adoption of the current cost plan of rating which meant a saving of in the neighborhood of $1,000,000 a year to the employers of the Province. Authoritative assurances were received to the effect that the Act authorized the current cost plan, and that it was the intention that that plan should be applied. Soon after the Board was appointed the matter was taken up and argued on a broad basis. It has not been possible, up to the present time, to secure a definite pronouncement, but a statement in the public press indicates that the Board interprets the Act in such a way as practically to compel the setting up of capitalized reserves.

Rates.

According to statements issued by the Board, the assesments levied upon the employers of the Province were the result of an exhaustive study of the experience of other jurisdictions. Without questioning this, it may be remarked that the Board took no advantage of the offer, made on behalf of the employers, to lay before the Board a large amount of material covering experience and the processes in Ontario, and to consult employers as to the outlines of the scheme of rating. Not only was the co-operation of employers refused, but the suggestion that the rates should be published was negatived, and a request on behalf of the Association for a copy of the schedule of rates for comparison has also been denied. It is necessary only to refer to such illustrations as the assessing of machine shops at $1.50 per cent., while furniture factories are assessed at .80 per cent., to show that the most elementary considerations must have been ignored in the striking of the rates.

Method of Assessment.

When the Act was going through the Legislature it was claimed on behalf of the employers that the proposed method of assessment, viz., that of rating upon the payroll of the previous year, was impracticable and absurd. Assurances were given by the Government that the Act would be changed and that the method would be one of periodical assessments adjusted at the end of the year on the actual requirement. In the State of Washingon, instead of collecting at the beginning of the year a premium sufficient to cover the whole year's cost of accidents, the administrators commenced by assessing only one-twelfth or one-quarter of the legal premium for the year, and assessed again only as and when the class insurance funds required replenishment; nor was there an interest charge on the unpaid premium instalments. By adopting this method the Washington administrators not only left in the pockets of manufacturers a large amount of capital which belonged to them of right, but at the same time worked by easy stages into a correct and exact system of rating. As illustrative of the difficulty of determining the rates, it might be pointed out that the initial assessment for a month or three months in Washington was, in some cases, sufficient to carry the fund throughout the entire year and beyond. The method provided for in the Ontario Act had necessarily to be abandoned, but the Board has adopted a method subversive to the whole scheme of group insurance upon which the Act was supposed to be based. A rate has been struck for the year and it is the declared intention of the Board to maintain this rate for the year regardless of the results of the year; that is to say, if the rate for tanneries, .80 per cent., produces double the amount necessary for the year, the balance will not be refunded, though the rates may be reduced the following year. There is no assurance, however, that if a rate is found insufficient a supplementary assessment will not be made to supply the deficiency.

Classification.

An altogether incomprehensible feature of the situation is the indisposition of the Board to correct the most obvious and glaring errors in the classification of industries. Soon after the appointment of the Board an offer was made to take up, by consultation with the members of the various groups, the question of proper classification and proportion of rates as between different industries in the same group. This offer was not accepted by the Board, and the employers were not, so far as we are aware, consulted in any way in regard to the ratings and proportions of hazard which the Board has adopted. In December, an application was made on behalf of the steel and iron manufacturers for a re-classification of their industries. It was pointed out that the division of the iron and steel industries in the Act into two groups, representing respectively heavy work and light work, was illogical and would result in injustice. It was pointed out in illustration, that the manufacture of safes and heavy machinery was not inherently more hazardous than the operation of small machine shops, manufacture of tinware, etc. The justice of the claims of the employers was recognized by the Board, but later a decision was given not to make the desired alterations, at all events for this year. On the other hand, the Board on its own initiative, undertook without consultation with employers, to make certain important changes, such as, for instance, the placing of shipbuilders in the navigation class. Protest on the part of manufacturers affected by these changes has not availed to secure any proper adjustment. As a result the Board has been driven to various shifts by way of coping with the anomalies produced by the illogical classification and rating. Instead of dealing with cases on a broad basis of principle exceptions are resorted to to meet individual cases, with the result that a general scramble has begun for better terms. Any relief given to one employer is necessarily at the expense of all the others in the same group and the enterprising and the importunate, and perhaps disingenuous, employer has the advantage over the rest.

FEBRUARY SAILINGS TO FOREIGN PORTS.

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, Niagara, February 17, 1915; from Victoria, Niagara, February 17, 1915.

To Melbourne, Sydney—The New Zealand Shipping Company: From West St. John, Rangatira, February 15.

British West Indies.

To Bermuda, St. Kitts, Antigua, Barbados, Grenada, Trinidad and Demerara—The Royal Mail Steam Packet Company: From St. John, Chaudiere, February 14, from Halifax, Chaudiere, February 26.

To Bermuda, St. Kitts, Antigua, Montserrat, Dominica, St. Lucia, St. Vincent, Barbados, Grenada, Trinidad and Demerara—The Royal Mail Steam Packet Company: From Halifax, Chignecto, February 12; from St. John, Caraquet, February 28.

To Santiago, Cuba and Jamaica—Pickford and Black Line: A Steamer, February 4; to Turks Island, Santiago, Cuba and Jamaica—Pickford and Black Line: Amanda, February 18.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, Niagara, February 17, 1915; from Victoria, Niagara, February 17, 1915.

Hawaii.

To Honolulu—Canadian-Australasian Royal Mail Line: From Vancouver, Niagara, February 17, 1915; from Victoria, Niagara, February 17, 1915.

New Zealand.

To Auckland—Canadian-Australasian Royal Mail Line: From Vancouver, Niagara, February 17, 1915; from Victoria, Niagara, February 17, 1915.

To Auckland, Wellington, Lyttelton, Dunedin—the New Zealand Shipping Company: From West St. John, Rangatira, February, 1915.

BRITISH TRADE AND THE WAR.

The exports of Great Britain in 1914 decreased more than £95,000,000 ($475,000,000), as compared with the preceding year. Imports decreased more than £71,000,000 ($355,000,000), according to the British *Board of Trade Journal.*

The figures for December show the continued effect of the war, imports falling another £4,000,000 and exports decreasing £17,000,000.

The increase of nearly £8,000,000 in the imports of foodstuffs was offset by a decrease of £11,000,000 in raw materials and manufactured goods, of which £6,000,000 was in cotton.

The principal decreases in the exports were £2,000,000 in coal and £6,000,000 in cotton, wool and textiles.

The principal shrinkages in the year's imports were £45,000,000 in raw material, of which £8,500,000 was in timber, £15,000,000 in cotton and £5,000,000 in rubber.

The chief export declines were £11,000,000 in coal and £12,000,000 in iron and steel manufactured goods, and £23,000,000 in cotton textiles.

GOOD ROADS CONVENTION.

The second Canadian and International Good Roads Convention and Exhibition will be held in the city of Toronto at Convocation Hall (University Grounds), March 22nd, 23rd, 24th, 25th and 26th, 1915.

Apart from the stimulus given this Dominion convention, due largely to the success which attended the first convention of this nature in Canada, and which was held in Montreal last spring, a feature of special interest is that this year's convention has been arranged under the joint auspices of the Dominion Good Roads Association and Ontario Good Roads Association, and in addition the support of other leading good roads organizations throughout the Dominion of Canada and the United States have been enlisted. The co-operation of the Ontario Good Roads Association will be of material assistance towards a successful meeting, as this organization has done much good work during the past several years to stimulate better roads in the Province of Ontario.

Several of the Provincial Governments will be represented at the convention and are taking an active interest in the matter.

HAMILTON MANUFACTURERS' SMOKER.

In urging the necessity of buying made-in-Canada goods at the Hamilton Manufacturers' Smoker on January 21st, Mr. E. G. Henderson, President of the Canadian Manufacturers Association, told his audience that manufacturers must try to set the example of patronizing home industry. He pointed out that now was the opportunity to Canadian manufacturers to build up an international reputation for the quality of their products.

TRANSPORTATION

I.

THE Interstate Commerce Commission, in a decision dated December 16th last, granted the petition of the Eastern United States carriers for an increase in their rates in so-called "Official Classification territory," but for various reasons excepted from the proposed increase lake and rail and rail and lake rates, as also those applying on bituminous coal and coke. The old basis of rates on the latter must be continued.

In the original application of the United States railways east of Chicago to increase their rates 5 per cent., the Interstate Commerce Commission, after an exhaustive investigation, issued, on July 29th, 1914, a report and order stating that no showing had been made by the railways warranting a general increase in trunk line or rail and lake rates. They, however, permitted an advance in rates not to exceed 5 per cent., except on certain commodities, in so-called "Central Freight Association territory" (west of Buffalo). Tariffs were filed accordingly, effective Nov. 15 last, increasing rates to and from Canada, Toronto and west to the Detroit River, and generally speaking no protests, so far as Canadian shippers are concerned, were made, neither was any action taken by the Canadian Board of Railway Commissioners in respect to the tariffs from points in Canada to the United States, of their own initiative.

Some time after the above order was made the railways in so-called "Official Classification territory" applied for a re-hearing because of conditions brought about by the war. This was granted, and after considering the data submitted at the various hearings the Commission issued an order granting the carriers in that territory the increase mentioned.

International Tariffs Filed.

Tariffs have been filed with the Canadian and Interstate Commerce Commissions, most of them effective about February 15th, advancing rates in accordance with the order, from points in the United States to Canada. Corresponding tariffs are being filed by the Canadian railways from points in Canada to the United States; in fact, the Canadian roads consider it proper to take advantage of the ruling and advance all rates, both international and export, even although in some cases the destination of the traffic is on the international boundary.

So far as is known, no application has been made to the Canadian Board of Railway Commissioners for an endorsation or otherwise of the findings of the Interstate Commerce Commission, notwithstanding the fact that it is the practice of our Commission to deal with rates from points in Canada to the United States; that is to say, it is the practice of the Interstate Commerce Commission to exercise control over rates from the United States to Canada and the Canadian Commission to supervise rates from Canada into the United States. However, in this case the Canadian carriers are pleased to recognize the jurisdiction of the Interstate Commerce Commission both ways. They have taken the position that they have a right under the orders of the Interstate Commerce Commission to advance their rates from Canada to the United States, stating that they are governed not only by the dictates of their connections, but also by the Interstate Commerce Commission, whether traffic moving internationally originates in Canada or the United States. Is this correct, or is it simply following the lines of least resistance, and taking advantage of the situation? Has our Board of Railway Commissioners been consulted or ignored? Some of our railways own or control and operate considerable mileage in the United States, yet their traffic officials say, or at least intimate that they have to be governed by what their connections are pleased to do. It is perfectly safe to say that the United States railways are prepared to do what is necessary in the interest of the industries located on their respective lines. Unfortunately, however, this has not been altogether the policy of our railways; in fact some of the rate structures in effect to-day are prejudicial to Canadian industries, although it must be admitted there has been an improvement therein in the past few years.

United States Decisions Should Not Govern.

As regards rates from Canada to United States points, they should bear in all cases a proper relationship to the rates on similar commodities in the United States coming into Canada and Canadian railways should be interested in seeing that this is done. Canadian industries cannot prosper if they are not afforded by our railways the same rates and facilities as are given their competitors, on all import traffic whether it comes to us by rail or water. Therefore, a horizontal advance in rates, seriously affecting Canadian industries, because of a ruling of the Interstate Commerce Commission, which was not unanimous, the chairman and one other commissioner disagreeing, should not be the governing factor in rate adjustments in Canada. The Board of Railway Commissioners for Canada have a right to intervene, but whether or not any action will be taken by that body of their own motion, is doubtful, probably for the reason that any interference on their part with joint tariffs from points in Canada to the United States might result in dislocating to some extent our present system of through rates, and furthermore, be looked upon as a reflection upon the findings of the Interstate Commerce Commission. Notwithstanding this there is a general feeling that our Commission should exercise whatever jurisdiction it has.

II.

Proposed Increase in Domestic Rates in Eastern Canada.

Press reports announce that the carriers contemplate an immediate increase in all freight rates in Eastern Canada, and that they will apply to the Board of Railway Commissioners for the necessary authority.

Apparently, so far as can be ascertained, this will be done by filing new tariffs covering the increases and wait action on the part of the Commission or the public; in fact, tariffs have already been filed advancing rates on grain and grain products from Ontario to points in the Maritime Provinces and from Fort William to all points east thereof, 1 cent in 100 lbs., effective Feb. 15. Tariffs increasing rates on other commodities are in the course of preparation.

It has been further stated that an attempt will be made to get the carriers by water to agree to the proposed increase.

No explanation as to the necessity therefor has been forthcoming. Whilst it is true that the revenues of the railways have diminished very considerably as compared with 1913, it must be remembered that this last year was an abnormal one. A comparison with 1911 would probably show that our railways are not so badly off as it has been made to appear during the past few months. Are they in a different position from that of a large percentage of the industries of the country? It would be unfortunate, if, when the industries are suffering as much as, if not more than, the carriers, and at the same time doing everything possible to keep their factories open, in many cases at a loss, in order to furnish employment, an additional burden were added now. High freight rates will not create tonnage, but rather tend to reduce it.

The present rate structure in Eastern Canada was prescribed by the Board of Railway Commissioners and went into effect in 1908. The order was made after a full investigation of the complaints of this Association and other bodies. A general advance in rates cannot now be made unless this order is rescinded. The question now is, will the Board make such investigation as may be considered necessary to determine the reasonableness of the proposed advance? The enquiry which led to the present basis of rates was an exhaustive one and the general readjustment which followed has proved satisfactory. It is true that some reductions were made, but there was also a considerable number of advances. One of the principal objections to the rates then complained of was the fact that there were different rates in effect from different distributing points. The order puts them all on the same footing.

Lack of Tonnage.

It would seem from what has recently been stated that the only remedy now for the diminishing railway returns is higher freight rates; in fact the statement has been made that there has been a general downward tendency in these rates during the past few years. Is this correct? Our observation is to the contrary. It is safe to say that there has been a decided improvement in this department; as a matter of fact, the carriers are suffering more from the lack of tonnage than from rates. Our rates, so far as the carriers are concerned, compare favorably with those in effect in the United States. There are a great many factors entering into the operation of our railways which should be considered very carefully by the Board of Railway Commissioners before allowing a general increase, such as has been announced. There can be no possible objection to a reasonable return for the services rendered. It would be unfortunate, however, to allow a condition of affairs to exist which would result in the public bearing the result of a lack of efficiency.

INSVRANCE

THE insurance involved in the Edison fire aggregates only $258,700, or very much less than the loss, which very clearly is only a fraction of the $5,000,000 announced at the time of the blaze. It is reported that some of the large companies lost their lines on this plant soon after declining to pay an excess commission, and hence have escaped the loss.

Lumber Insurance Company Retires.

The officers of the Lumber Insurance Company of New New York announce that after the expiration of its outstanding liability the company will be retired. The Lumber Insurance Company of New York was organized in 1904, and later was merged with the Adirondack Fire Insurance Compan, a company controlled by the same interests. It has a capital of $400,000. The company has confined its operations in a large part to lumber and woodworking risks, being under the control of interests prominent in the wholesale trade.

Since this company was formed the extensive operations of mutual and profit-sharing organizations, specializing in insurance on lumber and woodworking risks, has so far restricted the demand for stock company insurance that the volume of business obtainable in the specialty in which the Lumber Insurance Company was dealing did not seem to justify the proportionately large investment of the stockholders in capital and surplus.

Central Canada of Brandon to Liquidate.

Mr. A. E. Ham, Manitoba Superintendent of Insurance, has been appointed provisional liquidator of the Central Canada Insurance Company, of Brandon, Man., which has applied for voluntary liquidation under the Manitoba Insurance Act. The total assets at December 31st, 1913, were $309,740.33, while the liabilities, excluding capital, were $198,237.68. The paid-up capital was $158,580. Thus the capital was impaired $47,077.35. The company has been operating under a Manitoba charter since 1902. In 1913 it reinsured the business of the Saskatchewan and Alberta-Canadian. It wrote fire, hail, tornado and live stock insurance in Manitoba, Alberta and Saskatchewan. Although not licensed in Ontario, the company has transacted a certain amount of business in this Province. We understand that the British Colonial Fire Insurance Company has reinsured the outstanding liability of the "Central Canada," in which case the interests of policyholders will be fully protected, provided they insist on their policies being endorsed by the reinsuring company.

Canadian Fire Losses.

The fire losses throughout Canada during the year 1914 amounted to $24,321,012, as compared with $26,346,618 during 1913. Ontario headed the list of Provinces with $7,965,575 to its debit, Quebec coming second with $4,977,874. The number of lives lost by fire throughout the Dominion amounted to 175, this being an appreciable improvement over the five preceding years, which averaged 250 deaths per annum. Of the deaths occurring during 1914, no fewer than fifteen were caused by the victim lighting a fire with coal oil or gasoline, while eleven were caused through children playing with matches.

Insurance Against Capture of Cargo.

The following announcement has been made by the British Board of Trade:—

"It has been brought to the notice of the Board of Trade that British insurance companies have insured or re-insured

goods shipped on neutral vessels against the risk of capture or detention by His Majesty's Government or the allied Governments.

"The Board of Trade are advised that such contracts of insurance or re-insurance against the risk of capture or detention by Great Britain or her allies are prohibited by the law of England, and they think it necessary to warn British insurance companies and underwriters against undertaking such business."

Women and Insurance.

Mr. H. C. Cox, in a paper read at the eighth annual meeting of the Association of Life Insurance Presidents, mentioned several curious facts regarding the comparative longevity of insured and uninsured women. As far back as 1742 investigations were made which proved that females attained a greater longevity than males. This discovery was confirmed during the next hundred years, after which life insurance companies recognized the fact by offering lower premiums to women than to men, only to find, however, that the boasted longevity of women failed to assert itself when *insured* women were under observation. The unfavorable mortality amongst insured women gave rise to suspicion that officers had been greatly deceived by female applicants, who, it was asserted, could not have disclosed their true physical condition to the examining physicians. An excessive death rate in the first five years of risk seemed to bear out this contention, and it was even asserted that some women were subconsciously warned of the approach of disease while they were still in a perfect state of health, and, thus impelled by instinct, they applied for insurance. These facts have been substantiated in recent years. An investigation made by the Actuarial Society of America confirmed that the mortality amongst insured females is higher than amongst insured males, although the superior longevity of women *in general* is still unquestioned. Mr. Cox partly accounted for this wide divergence by the fact that women are ordinarily left to apply for insurance on their own initiative instead of being urged thereto by agents, as is the case with men. Probably less than seven per cent. of insurance risks are upon the lives of women. Naturally, therefore, policies on female lives are liable to include a greater proportion of less desirable risks.

TARIFF

By J. R. K. BRISTOL

Exports of Canadian Manufacturers.

As this subject is so near the heart of most manufacturers the fact may perhaps bear repetition that a refund is obtainable of 99 per cent. of the Customs duties paid on imported materials or articles, when to be advanced in manufacture in Canada and exported. The Tariff Committee of the Association, through its Tariff Department, can supply everyone interested with full information on the procedure to obtain such refunds and also as to the Customs requirements of other countries to which it may be proposed to make shipments.

Australian Tariff Changes.

The new Customs Tariff for the Commonwealth of Australia was brought into operation on December 11th, 1914. The tariff is still in resolution form, not having been ratified by the Commonwealth Parliament, and it will remain in the present form until March or April next when, in the regular course, it will be taken up by Parliament. In the meantime the new rates of duty are operative. These new rates of duty, as a rule, are considerably higher against Canadian products than the rates applicable under the former tariff. The new tariff also introduces, in many cases, a greater preference to the products of the United Kingdom than was provided under the old tariff. Thus, from the fact that under the new tariff practically everything is dutiable, except when the produce of the United Kingdom, and because of the very considerable advances in the general tariff rates, it appears this new tariff will have the effect of restricting shipments of Canadian products to Australia. It would be well, however, to bear in mind that when this proposed tariff is under discussion in the Commonwealth Parliament next March or April prior to being enacted into law, it is likely there will be a number of amendments or changes in the present provisions. Whether such amendments or changes will be made retroactive or will only apply from the time of being brought down in Parliament will be a question of policy for the Commonwealth Government to determine. At present all entries of goods subject to a higher duty than under the former tariff are being made "Under protest," with the view to claiming refund if subsequent amendments should be made retroactive.

Some opinion may be formed of the new tariff rates from the following statement, showing a few examples of changes in duties:

Comparison of Rates Under the Australian Tariff.

	——Old Tariff——		——New Tariff——	
	Former Preferential.	Former General.	New Preferential.	New General.
Clothing	35 p.c.	40 p.c.	40 p.c.	45 p.c.
Chassis	free	5 p.c.	free	10 p.c.
Lobsters, canned, per lb.	1 penny	1 penny	1 penny	1½ penny
Salmon, canned, per lb.	1 penny	1 penny	1 penny	1½ penny
Rubber boots, gum and wading	free	free	free	10 p.c.
Rubber sand boots and shoes	20 p.c.	25 p.c.	25 p.c.	30 p.c.
Other boots and shoes, including leather and other material	30 p.c.	35 p.c.	35 p.c.	40 p.c.
Agricultural Implements:				
Cultivators, disc	25 p.c.	25 p.c.	25 p.c.	30 p.c.
Cultivators, n.o.p.	20 p.c.	20 p.c.	20 p.c.	25 p.c.
Harrows	20 p.c.	20 p.c.	20 p.c.	25 p.c.
Ploughs	20 p.c.	20 p.c.	20 p.c.	25 p.c.
Hay tedders	free	free	free	10 p.c.
Horse rakes	free	free	free	10 p.c.
Corn binders	free	free	free	10 p.c.
Potato diggers	free	free	free	10 p.c.
Root pulpers	free	free	free	10 p.c.
Threshing machines	free	free	free	10 p.c.
Cream separators	free	free	free	10 p.c.
Spraying machines	12½ p.c.	15 p.c.	20 p.c.	25 p.c.
Garden and field rollers	12½ p.c.	15 p.c.	20 p.c.	25 p.c.
Stump pullers	12½ p.c.	15 p.c.	20 p.c.	25 p.c.
Mowing machines, reapers and binders	free	free	free	5 p.c.
Grain drills	25 p.c.	25 p.c.	25 p.c.	30 p.c.
Winnowers	25 p.c.	25 p.c.	25 p.c.	30 p.c.
Knitting machines	free	free	free	10 p.c.
Sewing machines	free	free	free	10 p.c.
Scales and weighing machines	20 p.c.	20 p.c.	20 p.c.	30 p.c.
Cash registers	free	free	20 p.c.	30 p.c.
Chemical, analytical and essay balances	free	free	free	10 p.c.
Machine tools	free	free	free	10 p.c.
Roller bearings and ball bearings	free	5 p.c.	free	10 p.c.

Log handsaws with band wheels	free	free	free	10 p.c.
Saws, n.o.p.	15 p.c.	15 p.c.	15 p.c.	20 p.c.
Machines and machinery, n.o.p.	20 p.c.	25 p.c.	25 p.c.	30 p.c.
Tractors	20 p.c.	25 p.c.	25 p.c.	30 p.c.
Kettles and other kitchen cooking utensils of cast iron, aluminum or nickel	free	free	free	10 p.c.
Organs	20 p.c.	20 p.c.	20 p.c.	25 p.c.
Pianos	30 p.c.	35 p.c.	30 p.c.	40 p.c.
Linseed oil, per gal.	6 pence	6 pence	6 pence	8 pence
Paints	15 p.c.	20 p.c.	20 p.c.	25 p.c.
Eyeglasses and spectacles	free	free	free	10 p.c.
Acetic acid, per gal.	6 pence	6 pence	6 pence	8 pence
Calcium carbide	free	free	free	5 p.c.
Anhydrous ammonia	15 p.c.	15 p.c.	15 p.c.	20 p.c.
Glycerine, crude	free	free	free	5 p.c.
Furniture, n.o.p.	30 p.c.	35 p.c.	35 p.c.	40 p.c.
Chairs of wood with cane or other seats	30 p.c.	35 p.c.	35 p.c.	40 p.c.
Gramophones and records	free	5 p.c.	free	10 p.c.
Belting (machine)	20 p.c.	25 p.c.	25 p.c.	30 p.c.
Rubber hose	20 p.c.	25 p.c.	25 p.c.	35 p.c.
Pneumatic rubber tires and tubes	20 p.c.	25 p.c.	25 p.c.	35 p.c.
Rubber tires other than pneumatic	20 p.c.	25 p.c.	25 pc..	35 p.c.
Pulp for paper making	free	free	free	5 p.c.
Printing paper	free	free	free	10 p.c.
Printing paper, for wrapping apples	free	free	free	10 p.c.
Roofing paper	free	free	free	5 p.c.

CUSTOMS RULINGS.

Board of Customs Decisions.

Greeley Hypodermic Units (sample) being entirely of drug and needle in container of metal and glass—metal of chief value—declared dutiable at 30 per cet. General Tariff and 20 per cent. Preferential Tariff.

NOTE.—Appraisers' Bulletin No. 630 should be altered to conform with above decision.

Ivory Soap, made by Proctor & Gamble, Cincinnati; on re-appeal the former decision of the Board was sustained that this soap is dutiable at 32½ per cent.

Departmental Rulings.

Ship's Windlasses. power, are now manufactured in Canada. Bulletin No. 327, page 39, should therefore be altered to read as follows:

"Windlasses (ship's), if power, Item 453."

Steam and gasoline net lifting machines for equipment of fishing vessels are now made in Canada. They are, therefore, not entitled to entry under Item 470.

Merrow Stitching Machines—30 per cent. General Tariff Item 440.

The famous *rotary, folding and gluing paper-box machine* manufactured by the International Paper Box Machine Co., Nassau, N.H., 10 per cent., Item 442.

Statistical Comparison of Canada's Foreign Trade.

During the month of December, 1914, there were imported dutiable goods to the value of $17,482,008, compared with $28,798,409 in the same month of 1913. The value of importations of free goods for December, 1914, is $12,910,905, compared with $16,206,143 in the same month of 1913.

The total importations, for December, 1914, were $31,454,883, compared with $52,571,831 in December, 1913—the difference between these totals, and the combined values of free and dutiable importations detailed above, represents importations of coin and bullion.

In exports, values compare as follows:

Month of December.

	Domestic 1913	Foreign 1914	Domestic 1913	Foreign 1914
The Mine	$4,778,334	$9,766	$3,791,299	$90,540
The Fisheries	2,524,487	8,252	2,136,581	11,616
The Forest	2,782,061	37,836	2,698,804	400
Animals and their produce	4,744,056	78,464	8,301,667	364,036
Agriculture	35,367,942	308,007	12,289,411	557,046
Manufactures	5,599,086	583,366	7,761,702	522,723
Miscellaneous	7,676	130,260	214,145	108,127
Total merchandise	$55,803,642	$1,155,951	$37,193,609	$1,654,488
Coin and bullion	34	292,498	15	79,908

For Nine Months Ending December.

	Domestic 1913	Foreign 1914	Domestic 1913	Foreign 1914
The Mine	$44,218,506	$177,923	$38,960,584	$276,574
The Fisheries	16,080,950	59,954	14,117,351	104,393
The Forest	35,976,857	591,045	35,056,103	476,990
Animals and their produce	43,568,859	1,069,752	58,436,712	2,330,424
Agriculture	177,706,169	8,495,487	106,608,923	34,840,517
Manufactures	41,478,454	8,476,597	53,186,926	5,613,002
Miscellaneous	85,829	2,599,270	456,440	2,999,000
Total merchandise	$359,115,624	$21,470,028	$306,823,039	$46,640,900
Coin and bullion	34	8,121,689	445	4,179,340

PROHIBITED EXPORTS.

Exportation from Canada of the following products is prohibited under an order-in-Council dated the 23rd day of January, 1915, viz..:

(1) The exportation from Canada of tinned meats and tinned plates to Sweden, Denmark and The Netherlands is prohibited.

(2) The exportation from Canada of tea, clover and grass seeds, motor vehicles of all kinds and their component parts, to all foreign ports in Europe and on the Mediterranean and Black seas, other than those of France, Russia (except the Baltic ports), Belgium, Spain and Portugal, is prohibited.

(3) The exportation from Canada of aniline oil, aniline salt, picric acid and its component parts, extracts for use in tanning, explosives of all kinds, valonia, grindery used in the making of boots and shoes, vessels, craft and boats of all kinds, floating docks and their component parts, also whale oil, viz., train, blubber, sperm or head matter, to all destinations except to the United Kingdom or any British possession, is prohibited.

DEATH OF MR. BOYER.

We regret to chronicle the death of Mr. Allen P. Boyer, President of the Stratford Mfg. Co., Stratford, Ont., at his home in Goshen, Ind., on January 21st. The deceased was well and favorably known in manufacturing circles.

PURCHASING AGENTS FOR WAR CONTRACTS.

In consequence of the misrepresentations that have been made to business firms in Canada and the United States by persons who have fraudulently styled themselves purchasing agents for the British and French Governments, it has been considered advisable by the Dominion Government to publish the following list of purchasing agents for military purposes of the allied governments:

British—Col. A. G. Barton and F. W. Stobart, Ritz Carlton Hotel, Montreal.

French—Hudson Bay Company, Montreal; Capt. La Foulloux, Hotel Brevort, New York; Direction De L'Intendance, Bordeaux, France; M. De La Chaume, 28 Broadway, London.

Russian—S. Ruperti and Alexsieff, care of the Russian Embassy, Washington.

HYDRO-ELECTRIC RATES.

The Ontario Hydro Commission have ordered a reduction in rates in the various municipalities concerned. The reduction will save the light and power consumers $200,000 per annum in addition to the $150,000 per annum saved by the 1913 reduction.

LEGISLATION

By F. W. WEGENAST

THE Legal Department of the Canadian Manufacturers Association for the past two months has been largely occupied with questions arising out of the readjustments necessitated by the decision of the Privy Council in the John Deere Plow Company cases. The principle of the John Deere decision is considered as applicable to the Acts of Ontario, New Brunswick, Nova Scotia, Manitoba, Alberta, Saskatchewan and the Yukon. The provincial authorities in these Provinces, not unnaturally, incline to doubt the efficiency of the decision as regards their particular Acts, and many controversies are pending as a result of the refusal of Dominion companies to pay fees and to make returns under the Provincial Acts. The question has also been raised by many companies whether the fees paid in former years under the assumption that the Acts were valid should not be refunded by the Provincial authorities. Numerous suggestions had been made that the Association should undertake the vindication of the John Deere decision in the different provinces and these suggestions were accompanied with offers to share any expense incurred. The Committee considered these suggestions, but were inclined to the opinion that the Association having secured the laying down of the general principle, the application of the principle should be a matter for individual action by the companies interested. It was thought, however, that there should be no objection to having the Legal Department, so far as consistent with other duties, assist members in maintaining their claims without any charge for services. The number of companies applying to the Legal Department to be advised has been so large that a meeting was called at the beginning of the month to consider some common course of action. The meeting appointed a committee to consider the whole situation and formulate some plan. The committee's deliberations resulted in the following recommendations:

Recommendations Made.

FIRST: That the Committee hesitate to recommend the suggestion of some of the companies that a test case should be taken up on their behalf by the Canadian Manufacturers Association. In view of the fact that the Association, at considerable expense, secured the laying down of the principle in the John Deere Plow Company cases the Committee are inclined to agree with the recommendation which it is understood the Legislation Committee of the Association have adopted, namely, that any further action by way of asserting their rights under the John Deere Plow Company cases should be undertaken by those companies individually interested. The Committee suggest, however, that an organization might be formed, possibly as a section of the Canadian Manufacturers Association, comprising federally incorporated companies, the object being to consider and undertake action in the common behalf in the matter immediately under consideration, and perhaps other matters that may arise from time to time.

SECOND: That the question of taking steps to secure refunds be left in abeyance until the situation further develops and the attitude of the different provinces is revealed as regards collection of further fees.

THIRD: That while the payment of further fees under the Provincial Acts is considered unnecessary it is a question of expediency for individual companies to decide for themselves as to whether they will continue to make the annual reports under the Licensing Acts of some of the provinces and to pay the nominal fees in connection therewith.

FOURTH: That where fees, whether nominal or otherwise, are paid, it should be under protest.

FIFTH: That the Secretary of the Committee, Mr. F. W. Wegenast, should be advised for common information as to the course adopted by each individual company.

Appearance on Companies Reference.

The general "Companies' Reference" is now before the Privy Council on appeal from the Supreme Court and will be heard between now and midsummer. This case covers a large number of questions respecting company incorporation and licensing, including the question which was raised in concrete form in the case of the John Deere Plow Company v. Wharton. Though the Privy Council, in giving leave to appeal in the Reference, indicated that they considered the licensing question had been settled in the John Deere Plow Company cases, it is possible that on the hearing the question may be re-argued on a broader basis and with reference to the Acts of the Provinces rather than British Columbia. A brief will be filed by the Canadian Manufacturers Association.

Bankruptcy Law.

There appears to be a recurrence of interest in this subject. Indeed there are not wanting indications that the need of a bankruptcy law is more imminent than it was a few months ago.

Patent Law Reform.

This matter will be followed up by representations to the Dominion Government during the coming session.

Uniformity of Provincial Laws.

This subject is being actively taken up by the newly formed Dominion Bar Associations, and the Canadian Manufacturers Association will co-operate with the Dominion Bar Association and the Provincial Bar Associations to secure uniformity.

THE DOMINION BANK STATEMENT

The Annual Report of the Dominion Bank shows a year of careful management and satisfactory profit. A dividend of twelve per cent. and bonuses of two per cent. yield a total profit of fourteen per cent. to shareholders, who should be gratified. The net profits for the year, after deducting all charges and making provision for bad and doubtful debts, reached $925,364, which, added to a balance of the Profit and Loss Account for last year of $647,688, and $188,655 received as premiums on new stock, make a total of $1,761,708. Of this amount, $835,236 went to the shareholders, $25,000 to the Officers' Pension Fund, $25,000 to the Canadian Patriotic Fund, $2,500 to the Red Cross, $1,000 to the Belgian Relief Fund, $188,655 was transferred to the Reserve, $100,000 written off bank premises, $300,000 reserved for possible depreciation of assets, and $284,316 carried forward to Profit and Loss Account. The Reserve Fund now stands at $7,000,000.

ECHOES OF THE MADE-IN-CANADA CAMPAIGN

Sentiment Strong for Exclusive Purchase of Goods made by Canadian Manufacturers

"WE used to find pretty strong competition from a certain Michigan stove concern," said the manager of a Hamilton stove firm recently in discussing the "Made-in-Canada" movement, "and largely because there were so many American settlers in the west who had always known the Michigan stove on the other side. We found it very difficult to get the retailers to stock our line, although our prices were a shade lower than those of the American concern.

"One of our best travellers was on his way back from the west at the time. He ran into an informal conference of retail hardware men in Regina, and found them discussing ways and means of keeping their business open. He wired us for permission to make them a proposition. We consented, and an agreement was reached whereby these men agreed to handle only made-in-Canada goods. On the other hand, certain makers in the east had to get together and agree to carry these fellows over the hard sledding. The result has been splendid. Banks, retailers and ourselves have co-operated. As a result of a made-in-Canada slogan we are able to keep our men employed and our machinery from rusting."

Brandram-Henderson's Policy.

Brandram-Henderson, Limited, have given the following statement to the press:—

"There can be no doubt we are all agreed it is the duty of every citizen of Canada at the present time to help provide employment for our working people.

"While thinking over this question a day or two ago the writer wondered how many Canadian manufacturers were bearing this fact in mind when making their ordinary personal purchases or the purchases of their households.

"It may interest you to know that we have resolved, so far as our company is concerned, from this time forward, no matter what we buy, we shall take pains to inquire if it is the product of a Canadian factory, and, if it is, quality being equal, we shall give it the preference. We think this is manifestly our duty at the present time, and we are asking our staffs of our different offices and the operatives in our several factories to do likewise.

"We have thought it worth while to advise you of this and to express the hope that you will be disposed to urge a similar duty upon all other Canadians with whom you come in contact."

Quality the Great Factor.

There is food for thought in the views of Mr. J. A. Jackson, of Goodwin's, Limited, Montreal, published in *The Canadian Hardware Journal*. He says:—

"We hear a great deal of talk these days about buying 'Made-in-Canada' goods, and it is quite right that we should buy in Canada. From the standpoint of a buyer I want to buy 'Made-in-Canada' goods, but from the standpoint of a seller it is necessary for me to buy the goods that sell, and on which there is a fair profit.

"For several years past I have made one trip a year to Germany, where I placed big orders, not because I wanted to buy German goods in preference to Canadian, British, or American, but because I was able to get in Germany much better values than anywhere else in a great many lines. Only a short time before war broke out I spent a couple of weeks in Germany and placed large orders for aluminumware, enamelware, cutlery, baskets, and miscellaneous articles. Of course, none of the orders were filled, as war was declared before the goods could be made, but I have since been unable to replace two-thirds of the order with other manufacturers because they are not made elsewhere—that is, not the same quality goods. I have submitted samples to many Canadian manufacturers, but generally find them slow to take up a new line. Of course, there are some firms who are awake to the opportunities, but the majority are not. The Americans are after the business, and are getting it, not because we want to give it to them, but because we've got to get the goods somewhere, and Canadian manufacturers won't supply them.

"People want value for their money, and they want what they want. They want to buy Canadian or British goods if they can get them, but they are not going to pay more for them than for imported goods, and we as buyers have got to supply the people with what they want.

"Let the Canadian manufacturers produce as good goods at as good prices as we can get elsewhere, and we won't give the people a chance to buy anything else but 'made-in-Canada' goods—we won't have anything else."

CANADIAN GOODS SATISFACTORY.

The British War Office approves of "made-in-Canada" goods, according to the following Canadian Press despatch, dated January 12th:—

"William L. Griffith, Secretary to the Lord High Commissioner in London, says in a statement to the press regarding the British purchases of war equipment in Canada:—

"In the past few weeks British orders placed in the Dominion have amounted to between $25,000,000 and $30,000,000. The French and Russians have also placed large orders in Canada."

MR. WHITE SAYS "PRODUCE."

"The Made-in-Canada movement is undoubtedly based upon a strong instinct of the Canadian people—that by producing what we are in a position to grow and manufacture for our own needs we shall assist in meeting the adverse balance of trade which only becomes formidable when we are cut off from the money markets of the world for the funds required for our legitimate requirements as a rapidly growing and economically developing country—a country of untold and unlimited resources with but three requisites for their development—capital, enterprise, immigration. The war has seriously interrupted the flow of capital and immigration. In order, under this condition, to meet our interest payments abroad, sustain our share of the burden of the war and promote to the greatest possible degree prosperity throughout the Dominion, it is the duty of all Canadian citizens to co-operate in producing as much as possible of what can be used or sold. For Canada at this juncture the watchword of the hour should be production, production and again production."—*Hon. W. T. White, Minister of Finance.*

C.P.R. POLICY WORTHY OF IMITATION

From the Toronto Globe.

"From the time the steel works at the Canadian 'Soo' started as a young industry to make steel rails, the Canadian Pacific Railway Company has been a consistent customer of that institution. It has bought rails on the other side of the line only when supplies were not available on this side, and, as a rule, has paid a higher price in the patronizing of home industry. But the C. P. R. looked at the proposition in this way; that by buying steel rails from the Canadian 'Soo' it helped materially in the maintenance of several hundred workmen, whose economic welfare, in turn, meant traffic to the railway which carried supplies of various kinds to their town.

Agitation is Necessary.

"In short, the purpose of the 'Made-in-Canada' movement is told in that commercial relationship which exists between the C. P. R. and the Canadian steel industry. Just now it is very necessary that every wholesale and retail establishment through which the consuming public must purchase their supplies of food, clothing and shelter should sell, in the largest measure possible, goods made in Canada. The *Globe* already has endeavored to show that the salesman has a more practical part to play in the furtherance of home industry than the purchaser. If the wholesale and retail trade of the country would undertake, in honor bound, to sell Canadian-made articles instead of those of foreign manufacture, wherever the former were available, and thus to develop the Canadian character of their stocks to the utmost, all the agitation urging the consuming public to buy 'Made-in-Canada' goods would be unnecessary. But the wholesaler and the retailer will not do this, and therefore the manufacturer makes his appeal directly to the people, and is endeavoring to educate the Canadian purchaser to ask for articles produced in his own country upon each and every occasion that he visits a store.

Home Production or Bankruptcy.

"The people in the end can force the storekeeper or the dealer to give them the Canadian-made article. But he should see, especially in the light of present conditions, why he should encourage home production without being forced to do so. Since the war broke out our exports as well as our imports have decreased with serious rapidity, and the only alternatives that confront Canada, in the face of such critical trade conditions, are increased production at home and a larger volume of business in the home markets, or bankruptcy. If Canadian-made goods are not sold in greater volume the merchant and the wholesale dealer must inevitably suffer, simply because a very large number of their present customers, people who work in factories and in offices dependent on factories, will be forced out of employment. Furthermore, regarded from a national point of view, the 'Made-in-Canada' movement, which means increased production in all departments at home, is the only method of raising the one hundred and fifty millions of interest which is due each year on the country's indebtedness.

Advertise for Permanency.

"How to increase the 'Made-in-Canada' trade to the maximum point of efficiency is the proposition which calls for solution. And the proper kind and most efficient sort of advertising is one very strong factor to be used in the promotion of 'Made-in-Canada' business. The campaign which is now under way is essentially one of education. It aims at permanent results, not merely temporary provisions. To educate the Canadian public in the matter of Canadian industry, or, in short, to develop the same kind of national sentiment in this country that stood behind the successful industrial career of Germany, it is necessary first to acquaint people with the things that are made in Canada, and, secondly, to create a feeling of popular pride in those things. The high place that is occupied in the markets of the world by Canadian cheese, the Canadian apple and Canadian hard wheat flour has served to create a goodly measure of national pride in Canada. Let the same feeling prevail toward every good thing that is made or grown in Canada."

U. S. TURNED OUT 515,000 AUTOS.

In 1914 United States manufacturers turned out 515,000 motor vehicles, valued at $485,000,000. This information came from Alfred Reeves, General Manager of the Automobile Chamber of Commerce, who added that this output came from 450 concerns. He said there were 1,500,000 cars registered in the various States, that there were 15,000 automobile dealers in the country, 13,630 garages and 680 supply houses.

FIELD PRACTICE HANDBOOK.

The value of periodical inspections of manufacturing risks is rapidly becoming recognized, and many firms have inaugurated an inspection system by appointing one member of the staff to furnish a weekly report. A publication which has recently appeared will doubtless be of considerable assistance to those undertaking such inspections. The Committee on Field Practice of the National Fire Protection Association has completed its two years' work in the compilation of an inspection manual. This publication is called "Field Practice," to distinguish it from an ordinary fire protection handbook, from which it differs radically in function. It is not a mere compilation of fire protection standards, but a handbook designed to educate and serve the man who is undertaking inspection work, and who, possibly, has had very little previous experience. This book is designed to point out the common faults in equipments, and those points of deterioration difficult for inexperienced persons to discover, with methods and suggestions for their remedy.

The Association has also published a list of its pamphlets. standards, bulletins, fire reports, etc., which will be sent on application to the Secretary, 87, Milk St., Boston, Mass.

GENERATOR FOR SALE.

One direct current generator, compound wound. Capacity 400. 16 C.P. lamps. 110 volts. Speed 1275 R.P.M. In first-class condition. Apply to Howard Smith Paper Mills, Montreal.

WAR ORDERS STILL BEING PLACED.

By January 30th, according to the estimates of *The Monetary Times*, $68,831,500 of war materials and equipment have been ordered by various governments in Canada, since August.

CEDARS RAPIDS POWER CO.

The Cedars Rapids Power and Manufacturing Co. are now delivering power in Montreal and elsewhere, all the new steel pole transmission lines between Montreal and Cedars Rapids, and between the power plant at Messina Falls, having been completed.

Reduced Rates for Hydro Current

See next month's advertisement for actual examples of further heavy savings which will be effected by users of Hydro current under the new rates.

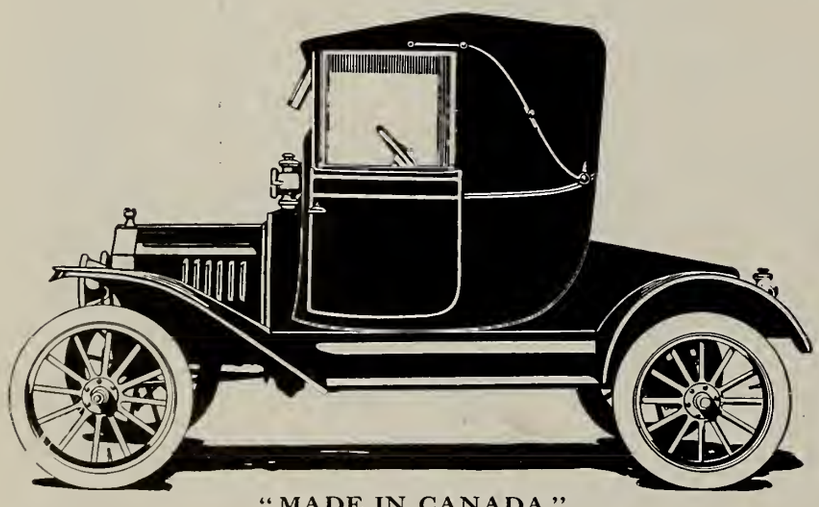
The
Toronto Hydro-Electric System
226 Yonge Street Phone Adel. 2120

UNION BANK STATEMENT.

The Union Bank of Canada, which held its annual meeting in Winnipeg on Wednesday the 6th inst., has just completed fifty years of progressive business in Canada. During the year ended 30th November, 1914, the bank earned net profits of $712,000.00, a figure which is but $38,000.00 less than the record showing made in 1913. With the $90,000.00 brought forward from the previous year, the bank had $803,000.00 available for distribution. Dividend requirements absorbed $450,000.00, the sum of $215,000.00 was set aside for depreciation in securities, the Patriotic Fund and Pension Fund took $35,000.00, leaving $103,000.00 to be carried forward.

An examination of the report shows that note circulation increased during the year, that the proportion of assets kept in liquid form has remained unusually high, that current loans are $4,000,000.00 greater than they were the previous year and now amount to over $50,800,000.00, while total assets also show an increase and now stand at $81,561,849.00.

The shrinkage in total deposits is not to be wondered at in view of world-wide conditions. In this connection it is to be noted that public deposits actually increased $386,000.00, the aggregate being, however, affected by withdrawal of Provincial Governments' deposits during months of special stress. Altogether the bank has made a remarkably good showing and one which reflects credit upon the management.



"MADE IN CANADA"

The Ford Coupelet

A car of style in a class by itself. Beauty in design. Rich in appointment. Roomy and comfortable. Every detail in material, make and finish carries the highest quality. Ford efficiency and large production making possible the following price

Fully Equipped (*f.o.b. Ford, Ont.*) $850

Buyers of this practical Ford car will share in profits, if we sell at retail 30,000 new Ford cars between August 1914 and August 1915. Write for catalog G—1.

Ford Motor Company OF CANADA, LIMITED.
FORD, ONTARIO

Ford THE UNIVERSAL CAR

PERSONAL.

J. A. Connor, London manager of the Canadian Consolidated Rubber Company, has been appointed to the managership of the company's office in Toronto.

E. W. Beatty, general counsel of the C. P. R., has been appointed vice-president.

B. Elshoff, recently resigned as superintendent of the electrical department of the Canadian Westinghouse Company, Limited, Hamilton, Ont., to become works manager of the Diehl Manufacturing Company, Elizabeth, N.J.

B. P. Richardson, late superintendent for Ross & Macdonald, architects, of Montreal, has opened an office at 54a Beaver Hall Hill, Montreal, with agencies for hydraulic and engineering supplies.

T. W. Kuehner, manager of the Maple Leaf Rubber Company's factory at Port Dalhousie, Ont., will leave shortly to take charge of the Montreal factory of the Consolidated Rubber Company at Montreal.

A pleasant affair, in the form of a triple presentation, took place recently in the head office of the Polson Iron Works and Shipbuilding Company. The recipients were Colonel J. B. Miller, President and General Manager of the company, who was given a gold-headed cane; Mrs. J. B. Miller, who received a gold-headed parasol, and Miss Margaret Miller, who was presented with a handsome necklace and locket. The presentations were made by William Newman, naval architect and works manager on behalf of the office staff and employees in the various departments of the works. Colonel Miller made a happy reply for himself and family.

Mr. G. H. Howard, who has been travelling for the A. R. Williams Machinery Company for the past seven or eight years, has severed his connection with that company to take a position on the sales staff of the John Bertram & Sons Company, Limited. Mr. Howard will represent the Bertram Company and their associate company, Pratt & Whitney Company of Canada, Limited, in the Niagara District and Western Ontario, with headquarters at Dundas.

Mr. T. Gibson, Toronto, has been elected president of the Lake Superior Corporation, Mr. J. Frater Taylor having resigned. Mr. Taylor intimated that on account of personally taking over in addition to the presidency the management of the Algoma Steel Corporation and its subsidiary companies he could not any longer undertake the duties of president of the Lake Superior Corporation, but will continue a director.

Mr. Benson, the newly elected president of the Montreal Board of Trade, is a past treasurer of the Board of Trade and a well-known Montreal business man. He is head of the firm of Messrs. W. T. Benson and Company; president and managing director of the Canada Starch Company; president of the Edwardsburg Starch Company; director of the West Kootenay Power and Light Company, and one of the promoters of the Prescott and Lake Superior Navigation Company.

WATERLOO ON THE ALERT.

The manufacturers of Waterloo County, through their Boards of Trade, are investigating the possibilities of securing some of the export trade which formerly belonged to Germany and Austria.

THE CANADIAN BANK OF COMMERCE

Report of the Proceedings of the Annual Meeting of Shareholders, Tuesday, 12th Jan., 1915

The forty-eighth Annual meeting of the Shareholders of The Canadian Bank of Commerce was held in the banking house at Toronto, on Tuesday, January 12th, at 12 o'clock.

The President, Sir Edmund Walker, having taken the chair, Mr. A. St. L. Trigge was appointed to act as Secretary, and Messrs. W. S. Hodgens and E. M Saunders were appointed scrutineers.

The President called upon the Secretary to read the Annual Report of the Directors, as follows:

REPORT.

The Directors beg to present to the Shareholders the forty-eighth Annual Report for the year ending 30th November, 1914, together with the usual statement of Assets and Liabilities:

The balance at credit of Profit and Loss Account, brought forward from last year, was		$ 384,529 98
The net profits for the year ending 30th November, after providing for all bad and doubtful debts, amounted to		2,668,233 29
		$3,052,763 27
This has been appropriated as follows:		
Dividends Nos. 108, 109, 110 and 111, at ten per cent. per annum	$1,500,000 00	
Bonus of one per cent., payable 1st June	150,000 00	
Bonus of one per cent., payable 1st December	150,000 00	
Transferred to Pension Fund (annual contribution)	80,000 00	
Subscription to Canadian Patriotic Fund	50,000 00	
Subscription to The Canadian Red Cross Society	5,000 00	
Balance carried forward	1,117,763 27	
		$3,052,763 27

The assets of the Bank have been, as usual, carefully revalued and ample provision has been made for all bad and doubtful debts.

During the year the Bank has opened the following new branches: In British Columbia: Alma Road (Vancouver); in Alberta: Rockyford; in Saskatchewan: Admiral, Central Butte, Gilroy, Hafford, River Street (Prince Albert); in Ontario: Grimsby, Madoc, Page and Queenston (St. Catharines), Bloor and Lippincott and Yonge and Eglinton (Toronto); in Quebec: Chicoutimi and St. Denis and Duluth (Montreal); in New Brunswick: Bath and Bristol, which, however, have since been closed. A sub-agency of the Coaticook Branch has been opened at Compton, Que., and the sub-agency at Bic, Que., has been made an independent branch. The branches at New Dayton and Tilley, Alta., River Street (Prince Albert), Sask., Gowganda, Ont., Fraserville, Que., West St. John, N.B., and the sub-agencies at Bromptonville and Foster, Que., have also been closed. Since the end of the year the sub-agency at Comox, B.C., has been closed

Your Directors record with regret the death of their late colleague, Hon. George A. Cox, during the past year. Mr. Cox had been a Director of this Bank for nearly twenty-eight years, during twenty of which he filled the offices first of Vice-President and then of President. By his death the Bank lost a strong friend and adviser whose business judgment was unusually sound. In accordance with the provisions of the by-laws as amended at the last annual meeting the vacancy created by his death was not filled.

In acknowledgment of our duty to the Empire and of the obligations placed upon us by the terrible conflict now raging in Europe, your Directors voted the sum of $50,000 to the Canadian Patriotic Fund, $5,000 to the Canadian Red Cross Society and $2,500 to the Belgian Relief Fund of the Toronto Board of Trade. The last-named sum will appear in the accounts of next year.

During the year the first audit of the Bank has been made by the auditors appointed at the last annual meeting in conformity with the requirements of Section 56 of the Bank Act. In addition the branches and agencies of the Bank in Canada, the United States, Great Britain and Newfoundland, and the Departments of the Head Office have as usual been inspected during the year by the staff of our own Inspection Department.

Your Directors have pleasure in again recording their appreciation of the efficiency and zeal with which the officers of the Bank continue to perform their respective duties.

ALEXANDER LAIRD, General Manager. B. E. WALKER, President.

Toronto, 5th January, 1915.

GENERAL STATEMENT

30th November, 1914.

LIABILITIES.

Notes of the Bank in circulation		$14,942,557 68
Deposits not bearing interest	$41,690,512 29	
Deposits bearing interest, including interest accrued to date	139,818,297 45	
		181,508,809 74
Balances due to other Banks in Canada		933,800 59
Balances due to Banks and Banking Correspondents elsewhere than in Canada		11,163,568 73
Bills payable		3,924,151 28
Acceptances under Letters of Credit		2,746,016 07
		$215,218,904 09
Dividends unpaid		$2,731 28
Dividend No. 111 and bonus, payable 1st December		525,000 00
Capital paid up	$15,000,000 00	
Rest Account	13,500,000 00	
Balance of Profits as per Profit and Loss Account	1,117,763 27	
		29,617,763 27
		$245,364,398 64

ASSETS.

Current Coin	$16,923,230 20	
Dominion Notes	13,413,985 15	
		$30,337,215 35
Notes of other Banks	$2,019,301 00	
Cheques on other Banks	5,197,975 85	
Balances due by other Banks in Canada	17,500 00	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	5,782,385 67	
		13,017,162 52
Dominion and Provincial Government Securities not exceeding market value		3,295,411 87
British, Foreign and Colonial Public Securities and Canadian Municipal Securities		1,791,071 90
Railway and other Bonds, Debentures and Stocks not exceeding market value		16,104,763 57
Call and Short Loans (not exceeding 30 days) in Canada on Bonds, Debentures and Stocks		8,926,859 91
Call and Short Loans (not exceeding 30 days) elsewhere than in Canada		18,750,526 61
Deposit with the Minister of Finance for the purposes of the Circulation Fund		760,641 36
		$92,983,653 09
Other Current Loans and Discounts in Canada (less rebate of interest)		132,168,482 26
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)		10,419,594 36
Liabilities of Customers under Letters of Credit, as per contra		2,746,016 07
Overdue Debts (estimated loss provided for)		733,826 88
Real Estate other than Bank Premises (including the unsold balance of former premises of the Eastern Townships Bank)	$1,252,344 80	
Less mortgage assumed	100,000 00	
		1,152,344 80
Mortgages on Real Estate sold by the Bank		382,002 93
Bank Premises at cost, less amounts written off	$4,986,991 69	
Less mortgage assumed on property recently purchased	300,000 00	
		4,686,991 69
Other Assets not included in the foregoing		91,486 56
		$245,364,398 64

B. E. WALKER, President. ALEXANDER LAIRD, General Manager.

REPORT OF THE AUDITORS TO THE SHAREHOLDERS OF THE CANADIAN BANK OF COMMERCE.

In accordance with the provisions of subsections 19 and 20 of Section 56 of the Bank Act, 1913, we report as follows:

We have audited the above Balance Sheet with the books and vouchers at Head Office, and with the certified returns from the branches, and have obtained all the information and explanations that we have required, and we are of the opinion that the transactions of the Bank which have come under our notice have been within the powers of the Bank.

We have checked the cash and verified the securities representing the investments of the Bank at its chief office and principal branches at a date other than and in addition to the verification at 30th November, and found that they were in agreement with the entries in the books of the Bank relating thereto.

In our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of affairs of the Bank according to the best of our information and the explanations given to us, and as shown by the books of the Bank.

T. HARRY WEBB, C.A., of Webb, Read, Hegan, Callingham & Co.
JAMES MARWICK, C.A., of Marwick, Mitchell, Peat & Co.
} Auditors.

Before moviug the adoption of the report the President called upon the Geueral Manager to address the Shareholders:

GENERAL MANAGER'S ADDRESS.

When we had the pleasure of addressing you on the occasion of our annual meeting for 1913, we had every reason to look forward with apparently well-founded expectations that the year just ended would prove uot less favorable than the precediug oue. There was a movement during the first months of the year so world-wide in its scope as to lead mauy to infer that the drift of financial affairs towards a moderate prosperity had become uumistakable. The uneasiness regarding the settlement of the Balkau question had almost disappeared, and with the gradual adjustmeut of other political and international difficulties there was an appareut readiness to returu to normal conditions. This enabled a large volume of securities to be marketed, which did much to relieve a very acute situation. As the season advauced the prospect of satisfactory crops and of fairly good returus from every legitimate euterprise should have assured a financial and industrial revival. Then came the outbreak of the European war, an event so tremendous in its import that at first we failed to realize the extent of the dislocation of busiuess that it would entail, and the consequent hardship and loss to every conceivable interest the world over; yet we have stood the shock with remarkable fortitude and courage.

Considering all these uutoward circumstances the report and statements now presented to you bring us the satisfactiou that we have not labored in vain. In cousequence of the extraordinary depreciatiou in the prices of all securities, we have made a careful revaluation on very strict lines; and having in the past been couservative and prudent with the disposition of our returns from this source, we were enabled to make all our adjustments without interfering with current profits. Our usual care has beeu exercised in providing for bad and doubtful debts, and with the returu of more propitious times we should derive very important recoveries.

The net profits for the year were $2,668,233.29, a decrease oi $324,717 from last year, and amounted to 9.36 per cent. on the Capital aud Rest combined. We were enabled to pay dividends amounting to $1,800,000, these being at the usual rate of 10 per cent. per annum, with extra bonus dividends of 2 per cent. The regular appropriation for the Pension Fund required $80,000, and subscriptions to Patriotic Fuuds amounted to $55,000. We are carrying forward in Profit and Loss Account a balauce of $1,117,763.27, as against $384,529.98 a year ago.

You will notice that no appropriation has been made in Bank Premises Account which shows an increase over last year of $405,510. This increase is mainly accounted for by the final payments on some of our larger buildings and by the sums expended in purchasing sites for a number of the smaller offices. As we indicated in the report presented to you in January, 1910, we have in the past endeavored to keep the figures of this account within 50 per cent. of the value of the properties which it covers. During the past year we obtained from reliable outside experts an appraisal of all the premises belonging to or controlled by the Bank, instead of relying, as formerly, upon the best information available through our various managers; and the result of this indicates that the figures given in our balance-sheet are well below the limit of 50 per cent. just referred to. This is a source of much gratification to us, emphasizing, as it does, the conservative estimates of our managers. In this connection we may add that the Bank owns and controls the stock of The Dominion Realty Company, Limited, by which company our smaller buildings are erected and owned. This stock is carried on our books at the nominal value of $1. The last annual statement of this Company, bearing even date with our own, shows a surplus of $3,240,411.78.

The Bank's notes in circulation stood at $14,942,557 at the close of our year, this account showing important fluctuations during the period under review, from a minimum in July of $11,934,000 to a maximum in October of $16,679,038. Our deposits decreased $11,304,905, accounted for by a general reduction in current account balances, which is not unnatural under the circumstances; the ordinary deposits bearing interest show a decrease of only $197,211, a remarkable exhibit when we consider the probable requirements of small depositors under existing conditions and the extraordinary opportunities which have offered for investing in first-class securities at remunerative rates. Bills Payable Account, representing our participation in international exchange transactions, amounted to $3,924,151, being a reduction of $5,591,636 from the figures of our last report. We wish to place on record that in accordance with an understanding acted upon by all the Canadian banks in London as to the moratorium in respect of bills of exchange, we adopted the policy agreed upon by the clearing banks, and re-accepted, with a few trifling exceptions, all our bills which matured in August, although during the whole period we were carrying bank balances more than sufficient to meet these commitments. At the expiration of the thirty days we resumed paying all our bills without exception. We did not take advantage of the moratorium in any other respect, and did so in respect of our bills merely to join in a united front to the public.

Call and Short Loans were $27,677,386 and other Current Loans and Discounts $142,588,076, as compared with $25,764,910 and $154,576,889 in our last report, the total being $170,265,463, a decrease of $10,076,337 for the year. Government and other securities were $21,191,247, a decrease of $2,766,571. The percentage of quick assets to liabilities to the public was 43.20. In thus strengthening our position we have the satisfaction of knowing that no credit usually granted to any of our customers was curtailed during this very trying year.

In accordance with the resolution passed at the annual meeting in January, 1912, and taking advantage of the provisions for this purpose contained in the revised Bank Act, the Directors passed a by-law on April 17th last, providing for the change of the par value of the shares of the capital stock of the bank from $50 to $100 each. Steps were at once taken to notify the shareholders of the change, and to communicate with those who held an odd number of shares, offering to arrange the purchase or sale of one share for them on being notified of their wishes. As a result, although approximately 1,400 shareholders held an odd number of shares, only twenty-four of these remained to be adjusted when the time limit set for the change expired on August 15th last. These twenty-four shares were subsequently sold and the proceeds remitted to the former owners in accordance with the provisions of Section 35a of the Bank Act. It is interesting to note, as indicating the loyalty of our shareholders to this Bank, that out of the large number affected by the change practically two-thirds preferred to add to their holdings rather than to part with even the small amount of stock represented by a fractional share. The number of the Bank's shareholders is now 6,147, as against 6,026 a year ago. The following table indicates how widely our shareholders are scattered, not only in Canada but abroad:

	No. of Shareholders.	No. of Shares.
Ontario	1,385	40,367
Quebec	1,193	30,354
Maritime Provinces	778	15,454
Westeru Provinces	161	2,959
In Canada	3,517	89,134
Great Britain	1,816	33,283
United States	707	25,690
Other Countries	107	1,893
Total	6,147	150,000

We have not thought it advisable to open many new branches, but are confining ourselves to districts giving unusual promise of future development, and in several instances we have closed brauches that had not proved profitable after a fair trial. We shall pursue this policy whenever possible, and thus endeavor to escape needless expense and loss. The net increase of branches during the year was six, the geographical distribution being as follows:

Alberta	52
British Columbia	44
Manitoba	23
New Brunswick	4
Nova Scotia	13
Ontario	87
Prince Edward Island	5
Quebec	82
Saskatchewan	60
Yukon	2
In Canada	372
Newfoundland	1
London, England	1
United States of America	4
Mexico	1
Total	379

The members of the staff now number 3,536, a slight decrease from the figures of last year, but with the decline of business, sufficient to equip every department efficiently We include in this number those on our honor roll who have temporarily left our service at the call of duty. We have given leave of absence to these officers on terms which should be very satisfactory to them, and it will be our pleasure and duty as far as possible to reinstate them when they return. Between 325 and 350 of our men have volunteered for military service of various kinds at home and abroad, besides very many others who are preparing for any emergency during the continuance of the war. This contribution of men and money and, what is more important, the loyal spirit manifested throughout our service, are creditable alike to our staff and to the Bank.

In reviewing the past year, we cannot but be impressed with the fact that Canada has had a remarkable escape from untoward disaster in financial matters, and we should realize that worse might have been our fate. With a courage begotten of experience, we shall face the future with full confidence that much good will eventually come out of the present situation.

The President then said:

PRESIDENT'S ADDRESS.

The war has so changed all business conditions that it may seem unnecessary to describe those previously existing, and yet without doing so it is difficult to estimate our present position. We had passed a period of trade expansion throughout the world which in our case had been sharply exemplified by our foreign trade returns for the year ending in March, 1913, when the excess of our imports over exports fell just short of 300 million dollars, and in addition to this we had to provide interest and dividends on securities sold abroad of from 100 to 125 millions. To meet this we can trace the sale of securities during the year 1913 to the extent of at least 350 millions. In the sharp contraction throughout the world which followed, the question confronting us was how well we could bear the loss of power to sell securities and the shrinkage of trade caused by the stoppage of the building operations based upon our sales of securities.

The more important of our public and private improvements were nearing completion, and the fact that we must in any event pause to demonstrate, by increased production the wisdom of building them, was clear to many, but the enforced contraction, though it naturally went too far in the other direction, was necessary to bring us to a halt. The world had gone through the severer phases of this contraction, and had entered upon the year 1914 with distinct hopes for improvement in many countries, notably in Canada. The great banks of Europe were able to increase their reserves, money was growing easier, the market for securities was improving, and indeed, by February many issues, which had been held back for some time, were successfully placed. In the United States the new tariff legislation and the new Bank Act were events of the highest importance, and if the effects of these were still somewhat uncertain, at least a great deal of painful doubt had been removed. Later on the prospect of a great crop left the question of improved rates for railroad freights the main point to be settled in order to put the United States again on the high road to prosperity. In Canada, while trade was still lessening in activity, and money still hard to obtain, and the prospect for our crops less hopeful than that of the United States, we felt that in order to make our future secure, we had only to lessen our pace and to turn our minds more to immediate production than to permanent improvements. Elsewhere, in France, in the Balkans, and in the Latin American republics, there was still much financial trouble to overcome, but conditions in London continued steadily to improve, and with that improvement the power to sell our securities seemed to be rapidly returning. It was, therefore, to a somewhat chastened but distinctly hopeful business community in Canada that the rumors of war at the end of July came with portents of evil in every direction.

It is not my part to-day to speak of what war means to us in its effect on our lives, on our hopes for our beloved Empire, or on the

happiness of our families—I may speak of it only in its less important effect, that on our material prosperity. As we know, the first effect on finance and trade was the closing of almost all the stock and merchandise exchanges in the world, the cessation of the enormous trade, not only between the countries now engaged in the war, but to a very large degree between neutral countries and those at war which were blockaded by the fleets of the allies, and the breaking down for the moment of all dealings in foreign exchange, letters of credit, and in the vast number of credit arrangements existing between banks in different countries throughout the world. This paralysis affecting for the moment a large part of the international trade of the world estimated at about forty billions of dollars annually, and also disturbing countless millions of domestic trade in all leading countries, was nearly universal in its effect merely because London, the great power house of the world, had to pause for a few days in order to consider how the new conditions were to be faced. I need not tell you what was accomplished in the way of remedial measures by the wisdom of the British Government and the leading bankers, merchants and men of affairs generally, but the few words which make the sufficient defence of the Chancellor of the Exchequer are pregnant with a meaning which cannot escape the historian of British affairs for centuries to come. He said: "There is no doubt that we have, I will not say, departed from any principles which have been accepted in this country, but that we have undertaken responsibilities which no Government has ever been called upon to undertake in the past." In the report of our London manager, which appears in our Review of Business Conditions, a most admirable summary is made of the various events in London bearing on the finance and trade of the world. In our own country, while the issues were smaller, they were of the most profound importance to us, and we can never be too thankful for the high intelligence and the quickness of action of our Minister of Finance. Our gold supply is not important in amount as compared with that of the greater nations, but its preservation is vitally important to us. To convince people that the hoarding of gold was unnecessary, and in any event to make it nearly impossible, was part of the task here, as it was in England. One of the most effective means of accomplishing this was, as far as possible, to make sure that the inevitable result of war in curtailing business would not be intensified by a lack of currency with which to carry on our daily affairs. The arrangements proposed by the Minister of Finance, approved by his Government and put into operation, all within twenty-four hours, were as follows:

(1) For the first time in the history of Canada, banks were empowered to pay their debts in their own notes. When these notes reached the clearing-house, however, they were redeemed in Government legal tenders or in gold. The notes were not, as many people suppose, made a legal tender as between individuals, and the main object of this arrangement was to prevent people from securing actual gold coin in order to hoard it, a process which would have been ruinous to the nation as a whole, although comforting to the individual who secured the gold.

(2) The banks would have been able under the Bank Act to issue the usual emergency circulation for crop-moving in September and this date was set back to August.

(3) The Government raised somewhat the limit for that part of its legal tender issues which is not entirely based on gold.

(4) The Government undertook to make loans to banks on approved security in order to aid them in carrying on the business of the country.

At that moment no machinery existed by which Canadian banks with call loans or actual cash, in either London or New York, could use such resources to pay debts in Canada. It seemed at first as if it would be necessary to declare several bank holidays in succession to afford time in which to work out remedial measures, but the latter were provided so promptly by the Government that no general cessation of business took place. The value of such measures is not to be judged by the use made of them. On the contrary, we are proud that they were used so little. Their real value consists in the assurance to the public and to the banks that steps have been taken, so far as lies in the power of the Government, to enable business to go on as usual. Since the passage of these measures the effect of the really wonderful provisions for financial relief set in force by the Imperial Government, the consequent ending of the British moratorium, the recovery of British and the partial recovery of other international exchange markets, the removal of nearly all enemies of the peace on the high seas, and the lowering, therefore, of the charge for the war risk in insurance, the partial resumption of operations by stock and merchandise exchanges and many other remedial features, all these have helped largely to restore the broken machinery of the world by which, before the war, all international and much of our domestic business transactions were carried on.

The only moratorium legislation put into effect in Canada thus far is in Manitoba and Saskatchewan. In Manitoba proceedings to enforce mortgage security on land are delayed for six months, while the period allowed for redemption is increased one year. The act does not affect trust deeds securing bonds, debentures or stocks. In Saskatchewan an act was passed giving wide powers to the Lieutenant-Governor for the protection of debtors, and these powers have been exercised by a proclamation extending protection to volunteers and reservists from all legal processes for six months, and by a further proclamation giving protection to all debtors against legal process under chattel mortgage, conditional sale or hire receipt, except with the approval of the sheriff.

In Ontario the Government have intimated their intention to introduce legislation requiring mortgagees and holders of similar securities to obtain an order from a judge before foreclosing, and giving the judge power in cases of great hardship to extend the time of payment. It is not intended to interfere with the collection of interest, rent or other debts of like character.

In Alberta a new act has been passed in connection with the proceedings for the foreclosure of mortgages and similar securities, but this is not in the nature of moratorium or other legislation caused by the war.

In this connection it may be well to say that the speaker has recently seen the returns of four large lenders by mortgage, the total principal of whose loans amounted to $60,000,000. On these loans interest has been paid in the east with only a very trifling percentage of arrears, while in the west about 92 to 94 per cent. of all interest has been paid, either at the moment when due or within three months thereafter. Anyone who can remember the conditions in the now rich Province of Ontario twenty-five years ago will think this a very good showing indeed.

In Saskatchewan there are now commissioners whose duty it is to look after the finances of the various municipalities in the province. It is interesting to learn that one company owning about fifteen million dollars in Canadian municipal bonds had at the end of the year only three town and three school section bonds, aggregating $4,500 of principal, in default, and this temporary default had taken place since August, and has no real significance.

We have in each year remarked upon the condition of our foreign trade, partly because in the disparity between imports and exports the danger line of our expansion is most easily found. We have to sell securities to settle this difference and we have to pay the interest on these securities. Frankly, with the balance against us at March, 1913, of $298,711,000, already referred to, we had gone far enough. The contraction in building operations and the general economy which had already begun helped to bring this debit balance down, so that by March, 1914, it had fallen to $171,620,000. The improvement, however, was caused by a reduction of only $41,325,000 in imports, while there was an increase in exports of $85,765,000. In these figures the export and import of coin and bullion are included. Heretofore it has not seemed worth while to adjust the official figures by leaving these items out, but during the half year ending September, 1914, the shipments of gold to Canada were so large as to render an adjustment imperative. The official excess of imports over exports for the half year was $89,213,000, but omitting shipments of coin and bullion it was only $64,022,000. From this time forward, imports should show a very great decline, while, because of high prices for grain, the carrying out of war contracts for the allied countries, and the general desire to sell all that is available and to buy nothing that is not a necessity, our exports and imports should in the near future more nearly meet than at any time since the early years of this century. This will be a highly creditable accomplishment, showing that without undue pressure we could in two or three years do what our unfriendly critics thought impossible, that is, adjust the very large trade balance against us. Of course, we have still our interest to pay, and this country, in order to meet the most conservative demands for development, must be a borrower for many years to come, but I think we need have no great fear of the future in this respect if we take sufficient care of our credit. During the year 1914, although the markets were only favorable at times, and, since the war, have been practically closed to us, we sold securities abroad amounting to over 225 millions.

As soon as Great Britain begins to buy any new securities other than war issues, she will buy ours, and meantime we must hope that the market for our bonds in the United States will continue to grow. We cannot too often draw the attention of that country to the fact that when our foreign trade is analysed the net debit for the difference between our sales and our purchases is payable to them and not to Europe. If the war prevents London from buying our securities, either the United States must buy them or our great trade with that country must fall away, and the cry of "Made in Canada" would then have even a wider significance than it has to-day. During the year ending March, 1914, again omitting the figures for coin and bullion, we made purchases from the United States to the value of $409,818,000 and we sold them goods to the value of $178,282,000, so that with a net excess of imports from all countries of $179,945,000, the excess in the case of the United States was actually $231,536,000. Part of this is, of course, offset by the actual cash brought into Canada by settlers from the United States, part by investments made here by Americans, and part by the purchase of our securities, but it has mainly been settled in the past out of the proceeds of our sales of securities in London and on the Continent.

It is not possible to forecast the effect of the war upon our economic position, and we must be prepared to meet each new condition as it arises, but we can learn something from the events of the war, and gain courage or caution as a result. The cost of the war to Canada is already arranged for in London, so that no money is being withdrawn from Canadian money markets on that account, and to the extent of 60 per cent., representing that part of the war expenditure, which is paid out in Canada, we obtain money in London with which debts abroad can be paid. The war has brought us military contracts and purchases of supplies on account of Great Britain, France and Russia, the amount of which has been estimated at much higher figures, but may safely be placed at about $30,000,000; our exports are thus increased and a corresponding ability to pay debts abroad created. One estimate of the result of the war on our foreign trade places the annual value of the imports into Canada, the movement of which is either directly or indirectly affected because of the war, at $110,000,000. We can gather from this some rough idea of the extent to which our imports will be restricted by inability to obtain the particular articles we desire. It is already clear, however, that reduction will also come from lessened imports due directly to lessened trade at home. On the other hand, exports will be enlarged in quantity and value by the foreign demand for foodstuffs of all kinds, and already the preparations for next year's crop exceed anything known heretofore. Less noticeable, but probably of great economic importance will be the result of the wave of economy which has swept over Canada, mainly an enforced economy, but affecting all alike whether incomes are reduced or not. The effect of the careful use of food alone, the realization of the value of a bit of unused land as a garden plot, the little or great increase in production of almost every farm in Canada, east or west, the willingness to wear out old clothes and to put off the purchase of all luxuries—no matter how desirable—the cry for goods "made in Canada," and the slow but gradual realization that every unnecessary import may be a wrong to Canada even if the purchaser himself can afford it—all of these things must, taken together, materially increase our financial ability to bear the strain of the war. On the other hand, many of our greatest industries are working on short time, or are practically closed down, our railroad earnings speak eloquently of the contraction of business, men are not thinking so much of making money as of conserving their position for better times, unemployment as a problem faces us as rarely before, and the daily newspaper makes it impossible to forget that our material affairs are a secondary consideration while we rest under the vast shadow of the war.

The clearing-house returns are, as usual, full of interest. For 1912 we had to record the highest figures reached up to that time in our clearing houses—$9,146,236,000, a gain of 23.74 per cent. over the figures of 1911. In 1913 there was still a gain, but one of

only 1.27 per cent., and there was a decline in most of the western cities. This year there is a decline in every city except one, the total for Canada being $8,070,120,000, a reduction of 12.87 per cent. It will be seen, however, that the figures for 1914 are still well in advance of those for 1911.

We continue our figures for the building permits of the four leading cities:

	1911.	1912.	1913.	1914.
Montreal	$14,580,000	$19,642,000	$27,032,000	$17,619,126
Toronto	24,374,000	27,401,000	27,038,000	20,672,498
Winnipeg	17,550,000	20,475,000	18,621,000	12,160,950
Vancouver	17,652,000	19,388,000	10,423,000	4,484,476

Immigration has nearly stopped for the time being, except from the United States and the Orient, but, owing to the war, it is impossible to obtain figures showing present conditions. We have, of course, lost for a time a large number of our best people by the despatch of our own contingent, by the return of reservists, and in other ways.

The reports of our superintendents and others on the business conditions in the various areas in which the Bank is interested are, needless to say, of more than usual importance. They range from references to the greatest financial events in the history of the world to the price of the agricultural products of a locality, and they give faithful representations of the various elements working for or against our prosperity. If we consider the awful effects of the war, we can but congratulate ourselves on the manner in which Canada has stood up under the strain and on the spirit shown by her people, while if we look beyond the war, we cannot doubt the ability of this country to carry out every prophecy made as to her future. In connection with the success which has attended our confederation of the North American provinces in one Dominion of self-governing people, we draw attention to the report of our Newfoundland manager, in which the hope is expressed that the last step contemplated by the Fathers of Confederation is now possible of attainment.

The motion for the adoption of the Report was then put to the meeting and carried. The retiring auditors, Messrs. T. Harry Webb, C.A., of Messrs. Webb, Read, Hegan and Callingham, Montreal and Winnipeg, and James Marwick, C.A., of Messrs. Marwick, Mitchell, Peat and Company, Montreal, were re-appointed auditors of the Bank for the ensuing year. The usual resolutions expressing the thanks of the shareholders to the Board of Directors, and also to the staff of the Bank, were unanimously carried. Upon motion, the meeting proceeded to elect Directors for the coming year and then adjourned.

The scrutineers subsequently announced the following gentlemen to be elected as Directors for the coming year: Sir Edmund Walker, C.V.O., LL.D., D.C.L., John Hoskin, K.C., LL.D. D.C.L., J. W. Flavelle, LL.D., A. Kingman, Hon. Sir Lyman Melvin Jones, Hon. W. C. Edwards, Z. A. Lash, K.C., LL.D., E. R. Wood, Sir John M. Gibson, K.C.M.G., K.C., LL.D., Robert Stuart, George F. Galt, Alexander Laird, William Farwell, D.C.L., Gardner Stevens, A. C. Flumerfelt, George G. Foster, K.C., Charles Colby, M.A., Ph.D., George W. Allan, H. J. Fuller, F. P. Jones.

At a meeting of the newly elected Board of Directors held subsequently, Sir Edmund Walker, C.V.O., LL.D., D.C.L., was elected President.

BANK OF HAMILTON

43rd ANNUAL STATEMENT

PROFIT AND LOSS ACCOUNT.

Balance at Credit of Profit and Loss Account, 30th November, 1913		$151,131 75
Profits for the year ended 30th November, 1914, after deducting charges of management, interest accrued on deposits, rebate on current discounts, and making provision for bad and doubtful debts		485,265 49
		$636,397 24
Appropriated as follows:		
Four quarterly dividends, in all 12 per cent.	$360,000 00	
Provision for Depreciation in Securities and for Contingencies	75,000 00	
Pension Fund	19,309 62	
Patriotic, Red Cross and Relief Funds	25,000 00	
		$479,309 62
Balance of Profits carried forward		$157,087 62

GENERAL STATEMENT.

LIABILITIES.

To the Public:		
Notes of the Bank in Circulation		$3,022,100 00
Deposits not bearing interest	$6,041,005 64	
Deposits bearing interest, including interest accrued to date of Statement	28,482,822 27	
		34,523,827 91
Balances due to other Banks in Canada		4,632 18
Balances due to Banks and Banking Correspondents in the United Kingdom and Foreign Countries		208,592 62
Acceptances under Letters of Credit as per contra		87,801 76
		$37,846,954 47
To the Shareholders:		
Capital Stock paid in	$3,000,000 00	
Reserve Fund $3,600,000 00		
Balance of Profits carried forward... 157,087 62		
	3,757,087 62	
Dividend No. 102, payable 1st December, 1914	90,000 00	
Former Dividends unclaimed	240 50	
		$6,847,328 12
		$44,694,282 59

ASSETS.

Current Coin	$667,892 03	
Dominion Government Notes 5,469,792 00		
	$6,137,684 03	
Deposit in the Central Gold Reserves	100,000 00	
Deposit with the Minister of Finance for the purposes of the Circulation Fund	155,000 00	
Notes of other Banks	260,745 00	
Cheques on other Banks	1,460,055 20	
Balances due by other Banks in Canada	296,318 44	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	256,792 31	
	$8,666,594 98	
Dominion and Provincial Government Securities, not exceeding market value	282,840 85	
Canadian Municipal Securities, and British, Foreign, and Colonial Public Securities, other than Canadian	2,610,150 68	
Railway and other Bonds, Debentures and Stocks, not exceeding market value	471,067 66	
Call and Short Loans (not exceeding thirty days) in Canada on Bonds, Debentures and Stocks	1,278,432 40	
		$13,304,086 57
Other Current Loans and Discounts in Canada (less rebate of interest)	$28,319,806 67	
Real Estate other than Bank Premises	345,166 36	
Overdue Debts, estimated loss provided for	167,417 08	
Bank Premises at not more than cost, less amounts written off.	2,092,393 51	
Other Assets not included in the foregoing	377,610 64	
		31,302,394 26
Liabilities of Customers under Letters of Credit as per contra		87,801 76
		$44,694,282 59

JOHN S. HENDRIE, President. J. P. BELL, General Manager.

AUDITORS' REPORT—In accordance with the provisions of Sub-sections 19 and 20 of Section 56 of the Bank Act, we report to the Shareholders as follows:—

We have examined the above Balance Sheet with the books and vouchers at Head Office and with the certified returns from the Branches, and we have obtained all the information and explanations we have required, and in our opinion the transactions which have come under our notice have been within the powers of the Bank.

We have checked the Cash and verified the Securities of the Bank at the Chief Office and at several of the principal Branches during the current year, as well as on November 30th, 1914, and have found that they agreed with the entries in the books of the Bank with regard thereto; in our opinion the Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Bank's affairs according to the best of our information and the explanations given to us, and as shown by the books of the Bank.

C. S. SCOTT, }
E. S. READ. } Auditors.
Chartered Accountants.

THE DOMINION BANK

Proceedings of

The Forty-Fourth Annual General Meeting of the Shareholders

The Forty-fourth Annual General Meetiug of the Shareholders of The Dominion Bank was held at the Banking House of the Institution, Toronto, on Wednesday, 27th January, 1915.

Among those present were noticed:—

C. W. Smith, William Davies, A. R. MacDonald (Epsom), Sir Edmund B. Osler, A. W. Austin, Robert Ross (Liudsay), E. H. Osler (Cobourg), C. A. Bogert, A. Pepler, C. H. Edwards, H. R. Playtner, Allan McPherson (Longford Mills), E. A. Begg, A. E. Gibson, W. R. Brock, W. D. Matthews, C. C. Van Norman, H. R. Van Norman, Walter J. Barr, R. J. Christie, James Carruthers, Hon. Thos. Crawford, Richard Brown, Charles Walker, H. W. Hutchinson, E. W. Hamber, J. G. Ramsey, Alan R. Ramsey, Cawthra Mulock, C. E. Lee, D'Arcy Martin, K.C., Charles B. Powell, L. H. Baldwin, Edward Galley, James E. Baillie, John F. Kavanagh, Andrew Semple, James Mathews, William McLeish, J. C. Eaton, William S. Kerman, Peter Macdonald, N. Hockin, Frank H. Macdonald, Rev. T. W. Paterson, J. E. Finkle, H. B. Hodgins, Harry L. Stark, Albert Nordheimer, J. K. Niven, William Ross, W. J. Fleury, A. C. Paull, Capt. Dudley F. Jessopp, W. C. Harvey, Graham Campbell, Edward Burns, William Mulock, jr., W. L. Matthews, Hon. J. J. Foy, K.C., M.L.A., George N. Reynolds, F. C. Taylor (Lindsay), H. T. Eager, Frank Arnoldi, K.C., Hon. Duncan J. McIntyre, Alex. C. Morris, F. L. Patton, F. S. Wilson (Picton), H. Crewe, A. Monro Grier, K.C., F. E. Dingle, Thomas Long, Edwin Roach, Dr. Charles O'Reilly, F. L. Fowke (Oshawa), Aemilius Baldwin, Dr. R. M. Bateman, V. H. E. Hutcheson, James Scott, F. J. Harris (Hamilton), J. B. Bell, R. S. McLaughlin (Oshawa), A. E. Ferrie, W. Gibson Cassels, Joseph Walmsley, M. S. Bogert (Montreal), Stephen Noxon, D. Henderson, K.C., Leighton McCarthy, K.C., G. H. Muntz, George McDonald, John M. Baldwin, Thomas Armstrong, M.D., A. J. Harrington, L. A. Hamilton, A. H. Campbell, H. S. Osler, K.C., J. Harry Paterson, E. C. Burton (Port Perry), J. Gordon Jones, H. Gordon MacKenzie, W. Wallace Jones, F. C. Snider, W. Cecil Lee, N. W. Tovell, H. E. Smallpiece, N. F. Davidson, K.C., John Firstbrook, J. J. Cook, John J. Dixon, R. M. Gray, W. H. Knowlton, H. S. Harwood, F. D. Brown, Thos. H. Wood, A. R. Boswell, K.C., Samuel Jeffrey (Port Perry), William Crocker, E. C. Jones, F. H. Gooch, J. O. Buchanan, John Leckie, W. C. Crowther, Sir Henry M. Pellatt, C.V.O., W. H. Edwards.

It was moved by Mr. W. R. Brock, seconded by Mr. A. W. Austin, that Sir Edmund B. Osler, M.P., do take the chair, and that Mr. C. A. Bogert do act as Secretary.

Messrs. A. R. Boswell, K.C., and W. Gibson Cassels were appointed scrutineers.

The Secretary read the Report of the Directors to the Shareholders and submitted the Annual Statement of the affairs of the Bank, which is as follows:—

To the Shareholders:—

The Directors beg to present the following statement of the result of the business of the Bank for the year ended 31st December, 1914:

Balance of Profit and Loss Account, 31st December, 1913		$ 647,688 32
Net profits for the year after deducting all charges and making full provision for bad and doubtful debts		925,364 94
Premium received on new Capital Stock		188,655 20
Making a total of		$1,761,708 46
Which has been disposed of as follows:		
Dividends (quarterly) at Twelve per cent	$715,244 67	
Bonus, Two per cent	119,992 00	
Total distribution to Shareholders of Fourteen per cent. for the year	$835,236 67	
Contribution of Officers' Pension Fund	25,000 00	
Contribution to Canadian Patriotic Fund	25,000 00	
Contribution to Canadian Red Cross Society	2,500 00	
Contribution to Belgian Relief Fund	1,000 00	
	$888,736 67	
Transferred to Reserve Fund—Premium on New Stock	188,655 20	
		$1,077,391 87
		$ 684,316 59
Written off Bank Premises	$100,000 00	
Reserved for possible depreciation in value of Assets	300,000 00	
		$ 400,000 00
Balance of Profit and Loss carried forward		$ 284,316 59

RESERVE FUND.

Balance at credit of account, 31st December, 1913	$6,811,344 80
Transferred from Profit and Loss Account	188,655 20
	$7,000,000 00

E. B OSLER, President. C. A. BOGERT, General Manager.

In the last Annual Report your Directors made reference to the general financial and commercial depression then existing, which condition was much intensified through the outbreak of the war in Europe in July last, necessitating the exercise of unusual care in administering the affairs of the Bank. It has been our endeavor to fully provide for the requirements of deserving borrowers, particularly those engaged in producing and marketing the foodstuffs of the country, at the same time maintaining strong cash reserves and liquidity of assets. This policy has been satisfactorily carried out.

The earnings were somewhat smaller than in 1913, but justified the declaration of the usual dividends and bonus after ample provision had been made for all accounts of a doubtful character and for possible depreciation in the value of assets.

The Directors feel that you will approve of certain unusual disbursements that were made from the profits of the year, namely, contributions to the Canadian Patriotic Fund, the Canadian Red Cross Society, and the Belgian Relief Fund, reported in detail in the Statement.

It will be observed that the issue of new Capital Stock of the 15th of February, 1913, is now fully paid up, the Capital Account standing on 31st December, 1914, at $6,000,000, and the Reserve Fund at $7,000,000.

A notable event in the history of the Bank has taken place since the Shareholders last met, in the completion of the new Head Office Building, which was occupied in November last. The results obtained may be considered highly satisfactory. Allowance has been made for the natural growth of the Bank's business, and every facility has been provided for the convenience of its customers; furthermore, considerable revenue will be derived from the space rented by the various tenants of the building.

During the year Branches were opened at Fort Frances, Ont., and in Toronto at Yonge and Hayden Streets, and at the corner of McCaul and St. Patrick Streets.

The following Western Branches were closed, as the business secured and the prospects did not justify their further maintenance: Hanley, Sask.; Claresholm, Alta.; Granville Street Branch, Vancouver; South Hill Branch, Moose Jaw; Hillhurst Branch, Calgary; Riverside Branch, Calgary; Fernwood Branch, Victoria.

In accordance with Section 56 of the Bank Act, and following their appointment at the last Annual General Meeting, a complete audit of the affairs of the Bank was made by your Auditors, Messrs. G. T. Clarkson and R. J. Dilworth, whose certificate is attached to the Statement now submitted.

In addition the usual inspections of all the Branches of the Bank have been made during the twelve months under review, and the Head Office Cash, Investments, and Balance Sheet of the 31st December were verified by a committee of your Directors.

E. B. OSLER, President.

Toronto, 26th January, 1915.

It was moved by Sir Edmuud B. Osler, M.P., seconded by Mr. W. D. Matthews, and resolved that the Report be adopted.

The retiring Auditors, Messrs. Geoffrey T. Clarkson and Robert J. Dilworth, were re-appointed Auditors for the current year.

The thanks of the Shareholders were tendered to the President, Vice-President and Directors for their services during the year, and to the General Manager and the other officers of the Bank for the efficient performance of their respective duties.

The following gentlemen were duly elected Directors for the ensuing year: Messrs. A. W. Austin, W. R. Brock, James Carruthers, R. J. Christie, J. C. Eaton, J. J. Foy, K.C., M.L.A., W. D. Matthews, A. M. Nanton, E. W. Hamber, H. W. Hutchinson and Sir Edmund B. Osler, M.P.

At a subsequent meeting of the Directors, Sir Edmund B. Osler, M.P., was elected President, and Mr. W. D. Matthews, Vice-President, for the ensuing term.

GENERAL STATEMENT

31st December, 1914.

LIABILITIES.

Capital Stock paid in		$ 6,000,000 00
Reserve Fund	$ 7,000,000 00	
Balance of Profits carried forward	284,316 59	
Dividend No. 129, payable 2nd January, 1915	179,979 10	
Bonus, Two per cent., payable 2nd January, 1915	119,992 00	
Former Dividends unclaimed	725 75	
		7,585,013 44
Total Liabilities to the Shareholders		$13,585,013 44
Notes in Circulation	$ 4,143,040 00	
Balance due to Dominion Government	1,552,861 95	
Deposits not bearing interest $ 8,597,303 89		
Deposits bearing interest, including interest accrued to date 49,169,692 86		
	57,766,996 75	
Balances due to other Banks in Canada	314,220 67	
Balances due to Banks and Banking Correspondents in the United Kingdom and foreign countries	2,088,126 19	
Bills Payable	9,600 00	
Acceptances under Letters of Credit	465,673 80	
Liabilities not included in the foregoing	531,576 85	
		66,872,096 21
Total Liabilities to the Public		$80,457,109 65

ASSETS.

Gold and Silver Coin	$ 1,604,941 79	
Dominion Government Notes	9,598,675 50	
Notes of other Banks	558,713 37	
Cheques on other Banks	1,937,110 23	
Balances due by Banks and Banking Correspondents elsewhere than in Canada	1,644,034 25	
	$15,343,475 14	
Dominion and Provincial Government Securities, not exceeding market value	409,287 29	
Canadian Municipal Securities, and British, Foreign, and Colonial Public Securities, other than Canadian, not exceeding market value	554,088 32	
Railway and other Bonds, Debentures, and Stocks, not exceeding market value	4,836,937 10	
Call and Short (not exceeding thirty days) Loans in Canada on Bonds, Debentures, and Stocks	6,135,683 13	
Call and Short (not exceeding thirty days) Loans elsewhere than in Canada	32,640 00	
		$27,312,110 98
Other Current Loans and Discounts in Canada (less rebate of interest)	$ 47,196,777 26	
Other Current Loans and Discounts elsewhere than in Canada (less rebate of interest)	12,248 16	
Liabilities of Customers under Letters of Credit, as per contra	465,673 80	
Real Estate other than Bank Premises	20,343 23	
Overdue Debts (estimated loss provided for)	114,606 10	
Bank Premises, at not more than cost, less amounts written off	5,051,778 65	
Deposits with the Minister of Finance for the purposes of the Circulation Fund	263,900 00	
Mortgages on Real Estate sold	18,872 11	
Other Assets not included in the foregoing	799 26	
		53,144,998 67
		$80457,109 65

E. B. OSLER, President. C. A. BOGERT, General Manager.

AUDITORS' REPORT TO SHAREHOLDERS.

We have compared the above Balance Sheet with the books and accounts at the Chief Office of The Dominion Bank, and with the certified returns received from its Branches, and after checking the cash and verifying the securities at the Chief Office and two of the principal Branches on December 31st, 1914, we certify that, in our opinion, such Balance Sheet exhibits a true and correct view of the state of the Bank's affairs, according to the best of our information, the explanations given to us and as shown by the books of the Bank.

In addition to the examinations mentioned the cash and securities, at the Chief Office and two of the principal Branches were checked and verified by us during the year and found to be in accord with the books of the Bank.

All information and explanations required have been given to us and all transactions of the Bank which have come under our notice have, in our opinion, been within the powers of the Bank.

Toronto, January 19th, 1915.

R. J. DILWORTH, }
G. T. CLARKSON, } of Clarkson, Gordon & Dilworth, C.A.

THE

Canadian Bank of Commerce

ESTABLISHED 1867

DIRECTORS

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L., President.
Z. A. LASH, ESQ., K.C. LL.D. - - Vice-President.

John Hoskin, Esq., K.C., LL.D.	G. F. Galt, Esq.
J. W. Flavelle, Esq., LL.D.	Alexander Laird, Esq.
A. Kingman, Esq.	William Farwell, Esq., D.C.L.
Hon. Sir Lyman Melvin Jones.	Gardner Stevens, Esq.
Hon. W. C. Edwards.	A. C. Flumerfelt, Esq.
E. R. Wood, Esq.	George G. Foster, Esq., K.C.
Robert Stuart, Esq.	Chas. Colby, Esq., M.A., Ph.D.
Sir John Morison Gibson, K.C.M.G., K.C., LL.D.	G. W. Allan, Esq.
	H. J. Fuller, Esq.

F. P. Jones, Esq.

General Manager - ALEXANDER LAIRD.
Assistant General Manager - JOHN AIRD.

Paid-up Capital - $15,000,000
Reserve Fund - $13,500,000

The Bank has branches in every Province in Canada, also in New York, Seattle, San Francisco, Portland, Ore., Mexico City, St. John's, Nfld., and London, Eng.

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . . $25,000,000
Capital Paid up $11,560,000
Reserve & Undivided Profits $13,000,000
Total Assets $180,000,000

HEAD OFFICE, MONTREAL

BOARD OF DIRECTORS

H. S. Holt, President E. L. Pease, Vice-President
E. F. B. Johnston, K.C., 2nd Vice-President

Wiley Smith	D. K. Elliott	Wm. Robertson
Hon. D. MacKeen	W. H. Thorne	A. J. Brown, K.C.
Jas. Redmond	Hugh Paton	W. J. Sheppard
G. R. Crowe	T. J. Drummond	C. S. Wilcox
	A. E. Dyment	

OFFICERS

E. L. Pease, General Manager
C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY—Corner William and Cedar Sts

Savings Department at All Branches

BUSINESS AS USUAL

IN THE

Toronto Harbor Industrial District

$1,000,000 spent in 1914—$1,000,000 more to be spent in 1915 on this development

TO OPEN up this Fine Home for Factories a limited number of lots is offered at very low rates

SEIZE the opportunity and secure a lot in the Most Modern Factory District in America

Three Transcontinental Railways
Free Railway Sidings
No Interswitching Charges

WRITE TO-DAY FOR FULL INFORMATION TO THE

TORONTO HARBOR COMMISSIONERS

ALEX. C. LEWIS, Secretary

50 BAY STREET TORONTO, CANADA

FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of January, 1915.

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

C.R.C.	R.R. No.	Effective.	Description.
Canadian Pacific Railway.			
Sup. 12 W 1973	Sup. 12 W 3240	Nov. 25-14	Class and commodity rates between Vancouver and points in Canada west of Port Arthur.
Sup. 17 W 1969	Sup. 17 W 3235	Various dates	Commodities between C.P. western line stations.
W 1994	W 3301	Jan. 1-15	L.C.L. shipments, packing house products loaded in refrigerator cars.
E 2910 cancels E 2740	E 2539 cancels E 2360	Jan. 7-14	Commodities Eastern Canada to B.C. coast points.
W 1998 cancels W 533	W 3308 cancels W 3271	Jan. 14-14	Commodities between San Francisco, San Pedro, etc., and C.P. Western line stations.
Sup. 7 W 1911	Sup. 7 W 3095	Jan. 14-14	Ores and concentrates from stations in B.C. to points in U.S.
Sup. 18 W 1969	Sup. 18 W 3235	Various dates.	Commodities between C. P. Western line stations.
W 1997 cancels W 1870	W 3307 cancels W 3009	Jan. 9-14	Ore and smelter products, Smelter, B.C., to points east and west in Canada.
Sup. 6 W 1911	Sup. 6 W 3095	Jan. 13-14	Ores and concentrates, stations in B.C. and Man. to points in U.S.
Sup. 15 W 1973	Sup. 15 W 3240	Dec. 20-14	Class and commodity rates between Vancouver, Victoria, Westminster and points east.
Sup. 8 W 1911	Sup. 8 W 3095	Jan. 18-14	Ores and concentrates, stations in B.C. to points in U.S.
Sup. 38 W 1615	Sup. 38 W 2443	Dec. 24-14	Lumber, shingles, etc., coast and interior mills to points in Eastern Canada.
Sup. 41 W 1806	Sup. 41 W 2866	Dec. 24-14	Lumber, shingles, etc., coast and interior mills to points on C.P., C.N. and G.T.P. Railways.
Sup. 17 E 2643	Sup. 17 E 2259	Dec. 14-14 (R) Jan. 10-15 (A)	Pig iron c.l., between C.P. stations. Advance. Reduction.
E 2915 cancels E 2749	E 2548 cancels E 2369	Jan. 11-15	Wool in grease, Port Arthur, Fort William and Westfort to points in U.S. Reduction.
Sup. 16 E 1714	Sup, 16 E 1301	Dec. 21-14	Canned goods c.l., between C.P. stations. Reduction.
E 2900 cancels E 2559	E 2531 cancels E 2166	Jan. 15-15	Building material, C.L., between C.P. stations. Advance. Reduction.
Sup. 34 E 2529	Sup. 34 E 2133	Jan. 15-15	Commodities, C.P. stations to points in U.S. Reduction.
Sup. 56 E 2713	Sup. 56 E 2330	Dec. 22-14	Commodities between C.P. stations. Reduction.
Sup. 34 E 2359	Sup. 34 E 1959	Dec. 28-14 (R) Jan. 22-15 (A)	Paper commodities between C.P. stations, and from and to connecting lines. Advance. Reduction.
Sup. 21 E 2189	Sup. 21 E 1785	Dec. 26-14	Commodities, C.P. stations to St. John and West St. John for export. Reduction.
E 2917 cancels E 2071	E 2550 cancels E 1668	Feb. 1-15	Lumber and forest products between C. P. stations, also to and from connecting lines. Advance. Reduction.
Sup. 15 E 2560	Sup. 15 E 2167	Jan. 8-15	Import freight, St. John and West St. John to C.P. points. Reduction.
E 2919 cancels E 1297 2376 2599 2713	E 2552 cancels E 879 4976 2210 2330	Feb. 1-15	Commodities between C.P. stations and to and from points in Maritime Provinces. Advance. Reduction.
Sup. 18 E 2643	Sup. 18 E 2259	Jan. 2-15	Pig iron, c.l., between C.P. stations. Reductions.
Sup. 59 E 2713	Sup. 59 E 2330	Jan. 2-15	Commodities between C.P. stations. Reduction.
E 2920 cancels E 937 1285 1322 2643	E 2553 cancels E 528 867 904 2259	Feb. 1-15	Iron and steel articles, between C.P. stations and to and from connecting lines. Advance. Reduction.
Sup. 60 E 2713	Sup. 60 E 2330	Jan. 1-15	Steel bars, c.l., Hamilton to Weston, 8½c. per 100 lbs.
Sup. 4 E 2838	Sup. 4 E 2465	Feb. 1-15	Commodities between points on C.P.R.
Sup. 12 E 1197	Sup. 12 E 1610	Feb. 1-15	Basis for Rates and Divisions from stations in Canada to points in U.S.
Sup. 2 W 1970	Sup. 2 W 3229	Jan. 23-15	Commodities, C.P. Western line stations to Oriental ports.
Sup. 14 W 1842	Sup. 14 W 2952	Dec. 29-14	Ores and concentrates, lake ports of call in B.C. to smelters.
Sup. 29 W 1351	Sup. 29 W 1983	Jan. 1-15	Weighing of c.l. freight on track scales.
Sup. 16 W 1973	Sup. 16 W 3240	Jan. 1-15	Class and commodity rates between Vancouver, Westminster, Victoria and points on C.P. Western lines.
Sup. 20 W 1969	Sup. 20 W 3235	Various dates.	Commodities between C.P. Western line stations.

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C.R.C.	R.R. No.	Effective.	Description.
Grand Trunk Railway.			
Sup. 17 E 2524	Sup. 20 C W 67	Nov. 17-14	Commodities between G.T. stations. Reduction.
Sup. 26 E 2457	Sup. 26 S 86	Dec. 14-14	Interswitching at G.T. stations. Reduction.
Sup. 75 E 2855	Sup. 75 C W 31	Nov. 20-14	Oshawa to Walkerville, castings L.C.L 25c. per 100 lbs. Reduction.
Sup. 1 E 2996	Sup. 1 C.W. 93	Dec. 30-14	Commodities between G.T. stations and to points in U.S. Reduction. C.P. stations
Sup. 23	Sup. 23	Dec. 5-14	Interswitching at G.T stations.
Sup. 71 E 2855	Sup. 71 C.Y. 31	Nov. 9-14	Iron and steel and iron commodities between G.T. stations.
Sup. 58 E 150	Sup. 58 G.B.Y.5	Nov. 9-14	Iron commodities between G.T. stations.
Sup. 14 E 254	Sup. 14 G.B.Y. 7	Nov. 9-14	Iron commodities from Belleville to G.T. stations.
Sup. 26 E 2457	Sup. 26 S 86	Dec.14-14	Interswitching at G.T. stations.
Sup. 73 E 2855	Sup. 73 C.Y. 31	Dec. 16-14	Commodities between G.T. stations and to and from connecting lines.
Sup. 13 E 2727	Sup. 13 C.N. 134	Dec. 5-14	Commodities, Eastern Canada to Vancouver, Victoria and Westminster, B.C.
Sup. 73 E 2855	Sup. 73 C.Y. 31	Dec. 16-14	Commodities between G.T. Stations and to and from connecting lines. Advance. Reduction.
E 3045	E 50	Dec. 15-14	Iron and steel commodities, Montreal to Portland, Me., for export. Reduction.
Sup. 265 E 2552	Sup. 265 C D 65	Dec. 21-14	Building material between G.T. stations. Reduction.
E 3036 cancels E 2552	C D 67 cancels C D 65	Jan. 15-15	Building material between G.T. stations and from and to connecting lines. Advance. Reduction.
Sup. 1 E 3018	Sup. 1 C I 160	Dec. 22-14	Iron and steel, Montreal and T.C. points to Truro and Halifax for furtherance. Addition.
Sup. 7 E 2779	Sup. 7 CP 102	Dec. 28-14	Paper commodities between G.T. stations. Advance. Reduction.
Sup. 14 E 2696	Sup. 14 I 144	Jan. 18-15	Import freight, Portland, Me., to G.T. stations and connecting lines. Reduction.
E 3046 cancels E 573	CF 277 cancels CF 12	Jan. 18-15	Lumber and forest products, Point Edward and Sarnia to points in U.S. Advance. Reduction.
E 3035 cancels E 2855	CY 36 cancels CY 31	Feb. 1-15	Commodities between G.T. stations and from and to connecting lines. Advance. Reduction.
Sup. 82 E 2855	Sup. 82 CY 31	Jan. 2-15	Iron or steel bars, Hamilton and Montreal to Sault Ste. Marie. Reduction.
Sup. 84 E 2855	Sup. 84 CY 31	Jan. 6-15	Wrought iron pipe, C.L., Welland to Nelles Corners, Ont., 7c. per 100 lbs.
Michigan Central Railroad.			
Sup. 2 2285	Sup. 2 9251 B	Dec. 16-14	Pig iron and iron and steel articles, M.C. stations in U.S. to points in Canada.
2340 cancels 1351	9588 cancels 7786	Dec. 10-14	Iron and steel articles, M.C. stations in Canada to points in Canada.
Sup. 1 2304	Sup. 1 9402 A	Dec. 15-14	Commodities New York, Philadelphia, etc., to points in Canada...
Sup. 2 2299	Sup. 2 9183 B	Jan. 15-15	Classes and commodities, M.C. stations in Canada, also C., W. & L. and C. N. Ry. to points in U.S.
Sup. 5 2285	Sup. 5 9251 B	Feb. 1-14	Iron and steel, M.C. stations in U.S. to points in Canada.
Sup. 18 2033	Sup. 20 9065 C	Feb. 6-15	Class and commodity rates, M.C. stations in the U.S. to points in Canada.
Sup. 19 2049	Sup. 19 9353	Jan. 15-14	Commodities between M.C. stations in Canada and points on connecting lines.
Baltimore and Ohio Railroad.			
1368 cancels 1058 Sup. 19 1044		Jan. 1-15	Commodity rates B. & O. stations to points in Canada.
Sup. 1 1322		Jan. 18-15	Iron and steel articles, B. & O. stations to points in Canada.
Buffalo, Rochester & Pittsburg Ry.			
787 cancels 534	A 2159 cancels A 820	Dec. 13-14 (A) Jan. 2-15 (R)	Iron and steel B. R. & P. stations to points in Canada.

MADE-IN-CANADA MOTORS.

"Made-in-Canada" motor cars for use in the war may be a realization before long, according to an intimation made by Hon. Louis Coderre, Secretary of State, when he formally opened the second annual auto show of the Montreal Automobile Trade Association. The Minister stated that the Dominion Government was working in co-operation with several manufacturers, to the end that Canadian producers of automobiles might be entirely emancipated from importation of automobiles or automobile parts, so that the Government could place all its orders in Canada for Canadian-made machines.

COST ACCOUNTANT WANTED.

Factory cost accountant for large Ontario rubber manufacturing company. Excellent opportunity for accountant who thoroughly understands and who has had practical experience in stores systems, overhead expense distribution and factory cost work generally. Applications, which will be treated strictly confidential, must state age, experience and salary expected. Apply Box 6, INDUSTRIAL CANADA.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

414. **Metal Polish.**—An agent in Paris with an established trade desires to be put in touch with manufacturers of metal polishes, particularly brass and copper, to replace on French market products formerly supplied by German concerns.

415. **Leather Polish.**—A Paris agent is anxious to open connections with manufacturers of leather polishes of all kinds to introduce them on French market in place of similar products formerly imported from Germany.

416. **Enamelled Ware.**—A Paris dealer wishes to communicate with manufacturers of various lines of enamelled ware in view of opportunity now offered to open a good market in France.

417. **Asbestos, Mica.**—An established firm in Paris, with branches in Havre and Lille, desires to communicate with producers of raw asbestos, mica, and other products utilized for industrial purposes.

418. **Raw Chemicals.**—An established British firm in Paris, having agencies in northern France, is anxious to get in touch with producers and exporters of raw materials used in the chemical industry.

419. **Iron and Steel.**—Commission agents wish to negotiate with Canadian manufacturer with a view to securing buying and selling agency in Argentine Republic of pig and iron, iron bars, iron and steel wire, and steel rails.

429. **Building Specialties.**—A manufacturers' agent in Manchester wishes to represent Canadian manufacturers of building specialties either on commission or otherwise.

430. **Agents for Pitprops.**—A Sheffield correspondent stated to be in touch with collier owners in the South Yorkshire and Staffordshire fields is open to act as agent for Canadian exporters of pitprops.

431. **British Columbia Fir.**—A firm in the south of France asks to be placed in touch with exporters of British Columbia fir used as railway ties and in freight car construction.

432. **Magnesite.**—A large market for Canadian magnesite is reported by a number of United Kingdom firms, who require analyses and samples together with quotations c.i.f. British port. Calcined magnesia averaging 90 per cent to 94 per cent. preferred, with not more than 2 per cent. or 3 per cent. silica, or 2 per cent. or 3 per cent. lime.

433. **Barb Wire, Fencing, and Wire Nails.**—A Bristol firm wants barb wire, wire fencing, and wire nails.

434. **Cotton canvas for shoes.**—An agent in Paris invites correspondence from manufacturers of cotton canvas used in the manufacture of shoes.

435. **Nickel and Nickel Chrome.**—A firm in Paris with an established trade, desires to obtain quotations from producers of nickel and nickel chrome, for which a good demand exists at present.

436. **Furniture.**—A firm of manufacturers' agents in Paris desires to communicate with manufacturers of all lines of furniture in bent wood and receive catalogues and quotations c.i.f. Havre.

437. **Woolen Goods, Sweaters, etc.**—A French firm is asking to be put immediately in connection with Canadian concerns able to supply woolen goods, sweaters, etc., and pharmaceutical supplies.

438. **Nails, Bolts and Nuts, Etc.**—A London merchant house which has hitherto exported to Australia and New Zealand wire nails, bolts and nuts, machine screws, barbed wire and similar classes of goods of German make, desires to get into touch with Canadian manufacturers able to supply their requirements.

439. **Excelsior.**—A firm in Birmingham is open to receive immediately quotations for 500 long tons excelsior, free from turpentine, for packing eggs, prices c.i.f. Liverpool or Alexandria, Egypt, if possible.

440. **Tubular Steel Wheelbarrows.**—A South African commission agent is prepared to take up agency for Canadian-made tubular steel wheelbarrows. Immediate correspondence with full particulars is requested.

441. **Hinges.**—A South African commission agent of good experience is prepared to take up an agency for Canadian-made hinges. Immediate correspondence is requested, with full particulars.

442. **Bolts and Nuts.**—Inquiry is made by a South African commission agent for agency in Canadian-made nuts and bolts.

443. **Axes.**—A South African commission agent asks for immediate correspondence with full particulars *re* agency for Canadian-made axes.

444. **Carriage and Cart Materials.**—A South African commission agent is prepared to take up agency for Canadian carriage and cart material. Immediate correspondence with full particulars is desired.

445. **Churns.**—A South African commission agent is open for immediate correspondence with full particulars for agency in Canadian churns.

446. **Dairy Utensils.**—Inquiry is made by a South African commission agent with experience for agency in Canadian-made dairy utensils. Immediate correspondence with full particulars is requested.

447. **Cream Separators.**—A South African commission agent with sixteen years' experience is prepared to take up agency for Canadian-made cream separators. Immediate correspondence with complete information is required.

448. **Woodenware.**—A South African commission agent makes inquiry for agency in Canadian woodenware of all kinds. Immediate correspondence with full particulars is required.

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Marine Insurance effected at rates equal to those given from New York.

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449. **Stepladders.**—Inquiry is made by a South African commission agent for agency in Canadian-made stepladders. Immediate correspondence with full particulars is requested.

450. **Hasps.**—A South African commission agent makes inquiry for agency in Canadian-made hasps. Immediate correspondence with full information is requested.

451. **Brackets.**—A South African commission agent is prepared to take up agency for Canadian-made brackets. Immediate correspondence with full particulars is desired.

452. **Handles.**—A South African commission agent requests immediate correspondence with full particulars *re* agency for Canadian-made handles.

453. **Tools.**—A South African commission agent requests immediate correspondence with full particulars *re* agency for Canadian-made tools.

454. **Shovels**—A South African commission house requests immediate correspondence with full particulars *re* agency for Canadian-made shovels.

455. **Chairs.**—A South African commission agent is prepared to take up agency for Canadian-made medium-priced chairs. Immediate correspondence with full particulars is requested.

456. **Rubber Hose Pipes.**—Inquiry is made by a South African commission agent for immediate correspondence with full particulars *re* agency for Canadian-made rubber hose pipes.

457. **Mining Machinery.**—A Johannesburg firm of many years' standing requests immediate correspondence from any Canadian firm who is prepared for export on machine tools.

458. **Electric Shades, Etc.**—A Newfoundland commission agent desires to represent a Toronto manufacturer.

459. **Wire Nails and Wire.**—A London firm of importers asks to be placed in communication with Canadian manufacturer of wire nails, and brick and galvanized wire and fencing wire.

460. **Wire Rope for Mines.**—Inquiry is made by a South African commission agent *re* agency in Canadian-made wire rope for mines. Immediate correspondence with full particulars required. Quotations should be f.o.b. Montreal or St. John.

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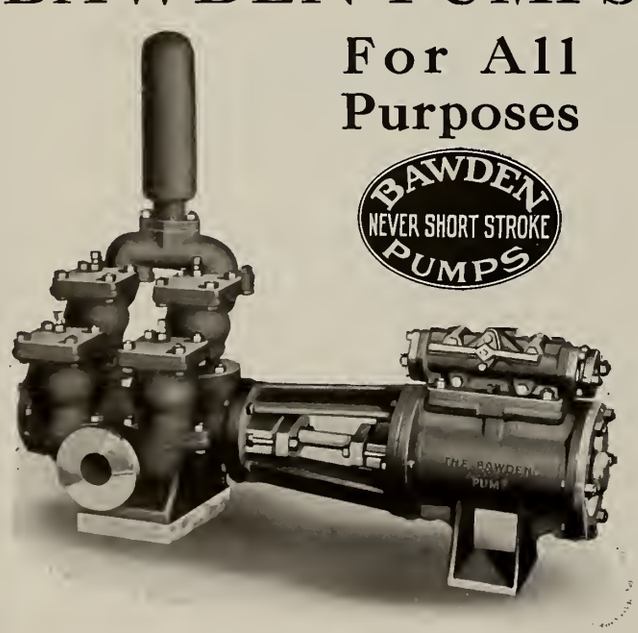
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461. **Steel Shovels.**—A South African commission agent is prepared to take up agency in Canadian-made steel shovels. Immediate correspondence with full particulars is required. Quotations should be f.o.b. Montreal or St. John.

462. **Steel Plates and Angles.**—A South African commission agent is prepared to take up agency for Canadian-made steel plates and angles. Immediate correspondence with full information required. Quotations must be f.o.b. St. John or Montreal.

463. **Steel Structure Work.**—Inquiries are made by a South African commission agent *re* agency in Canadian-made steel structure work. Quotations must be f.o.b. St John or Montreal. Immediate correspondence with full information is required.

464. **Carriage and Cart Material.**—A commission agency covering Rhodesian territory regularly and the Union of South Africa from time to time, is prepared to take up agency for carriage and cart material. Immediate correspondence with full information is requested.

465. **Churns.**—A commission agent covering Rhodesian territory regularly and the Union of South Africa from time to time is prepared to take up agency for churns. Immediate correspondence with complete information is requested. Prices should be f.o.b. Montreal or St. John.

466. **Washing Machines.**—A commission agent covering all South African centres asks for immediate correspondence with full information *re* agency for washing machines. Catalogues with f.o.b. prices Montreal or St John required.

467. **Oats.**—A Carnarvon firm inquires for quotations, and samples of oats packed in 200 lb. sacks.

468. **Boots and Shoes (Men's and Women's).**—A South African commission agent is prepared to take up Canadian agency for men's and women's boots and shoes. Illustrated catalogues with f.o.b. quotations Montreal or St. John requested.

469. **Leather.**—A Cape Town manufacturers' agent asks for samples of Canadian leather with full information *re* agency. Prices should be f.o.b. Montreal or St. John.

470. **Socks and Hosiery, Men's and Women's.**—A Cape Town commission agent is open for agency in Canadian-made men's socks and women's hosiery. Samples with f.o.b. prices Montreal or St. John required.

471. **Gloves, Wool and Kid.**—A South African commission agent asks to be placed in communication with Canadian manufacturers and exporters of woolen and kid gloves. Full information *re* agency requested, also samples with f.o.b. prices Montreal or St. John.

472. **Pulleys, Wood Split.**—A Cape Town engineering firm requests complete information and catalogues with f.o.b. prices Montreal or St. John in Canadian-made wood split pulleys.

473. **Cereal Foods.**—Inquiry is made by a Cape Town commission agent for immediate correspondence covering all details *re* agency in Canadian cereal foods.

474. **Agricultural Machinery.**—A Cape Town commission agent is open for agency in Canadian agricultural machinery. Immediate correspondence with full particulars required, also illustrated catalogues with f.o.b. prices Montreal or St. John.

475. **Shovels.**—Inquiry is made by a Cape Town agent for immediate correspondence with full particulars *re* agency in Canadian shovels. Catalogues with f.o.b. prices Montreal or St. John required.

476. **Leather.**—A Cape Town commission agent is prepared to take up agency in Canadian leather. Immediate correspondence with full particulars is requested. Quotations should be f.o.b. Montreal or St. John.

477. **Axes.**—A South African commission agent is open for agency in Canadian-made axes. Illustrated catalogues with f.o.b. prices Montreal and St. John, also immediate correspondence with full particulars.

478. **Asbestos.**—A dealer in Paris wishes to get in direct touch with asbestos mining corporations. Quotations c.i.f. Havre, or Liverpool, where connections can be made with Cunard Line service to Havre.

479. **Agency.**—An English agent with a connection of some years' standing desires to represent in England Canadian manufacturers of hardware and electrical specialties.

480. **Builders' Materials.**—A New Zealand firm of agents desires to be placed in touch with Canadian exporters of builders' materials.

481. **Telegraph Poles.**—A correspondent in New Zealand desires to be placed in touch with manufacturers in a position to export telegraph poles.

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A HUNDRED and one roofing manufacturers ask for your patronage. Each backs his claims with arguments that seem convincing. It's confusing to say the least. And the loss is yours if you select unwisely.

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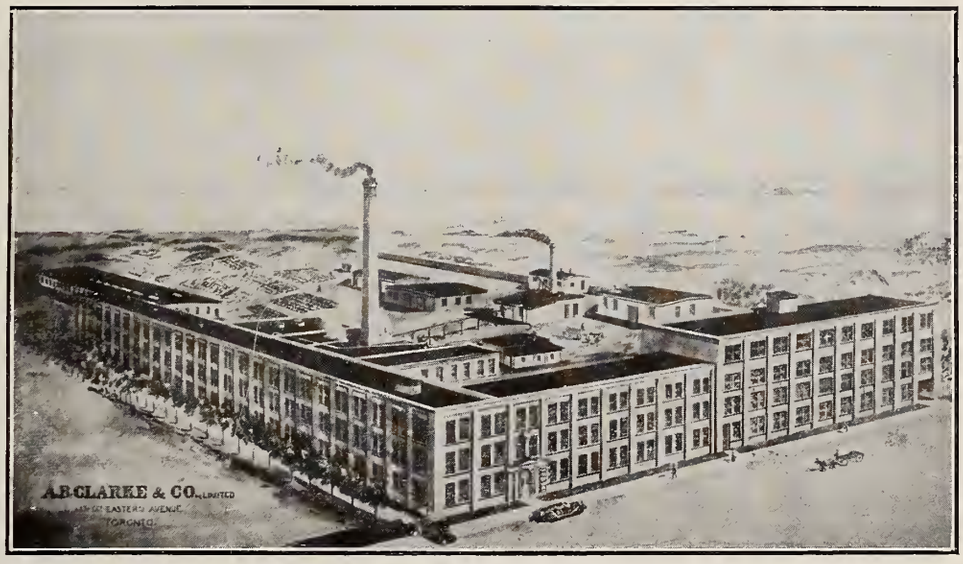
But, more than this—we remind you that behind this "promise to perform" is the security that lies in buying your roofing from a company with a country-wide organization built up by a policy that does not willingly permit a single customer to be dissatisfied.

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the public has been familiarized with the names and qualities of the products and the fact that they are "Made-in-Canada," and is thus in a position to ask definitely for certain goods when buying, instead of having to make general enquiries.

If you are a regular Advertiser possibly our ideas as to how you can best take full advantage of the "Made-in-Canada" Campaign, which we are handling, would be helpful.

If your customers are restricted to a limited class possibly we could show you how inexpensively you can tie your proposition up with the general "Made-in-Canada" movement.

If you are not an Advertiser and your product has advertising possibilities, aside from the "Made-in-Canada" movement we might be able to suggest a method of development on conservative lines, which would appeal to you.

On request we will be glad to make a study of your particular needs and to submit complete plans and estimates.

Address nearest office.

A. McKim Limited

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AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Macleod, Alta.

The mills of the MacLean Flour Mills Company which were recently destroyed by fire, at a loss of $35,000, will be rebuilt.

BRITISH COLUMBIA.

Alberni, B.C.

A. J. Waskett will erect a shingle mill here at an estimated cost of $25,000.

Fort George, B.C.

The Northern Lumber Company is rushing construction of their new mill at Fort George.

The recent disastrous fire at Fort George totally destroyed the lighting system. It is expected to temporarily relieve the situation by connecting up with the Northern Interior Power Company. Reconstruction of the system will, however, probably be taken in hand as soon as possible.

Fraser Mills, B.C.

The Canadian Western Lumber Company reopened their big Fraser mills, which employ 300 men, on January 18th, after a shut-down of several weeks, having received an order for shipment to the United Kingdom, via the Panama Canal, of 3,000,000 feet of lumber.

Grand Forks, B.C.

The Granby Smelter and Refining Company have blown in two more of their smelters, making four now in operation and expect to blow in a further four shortly. The plant remained closed from the outbreak of war until December 20th.

Kamloops, B.C.

The new hydro-electric plant on Barriere River has been put into commission. The plant consists of two 600 k.w. generators, each driven by two 1,100 h.p. turbines, operating at a head of between 180 and 190 feet.

New Westminster, B.C.

The Grain Growers' B.C. Agency, Ltd., have let a contract for the erection of elevator and storage buildings.

The Laminated Materials Company of Boston are leasing the factory at New Westminster formerly occupied by the Dominion Match Company, Limited, and are installing machinery for the manufacture of their patented boxes for the packing of fish, fruit, etc. The native cottonwood will be extensively used.

The Wilton shingle plant at Eburne, on the North Arm, will shortly be in operation again. The mill has 200,000 per day capacity, and was formerly operated by the North American Lumber Co., Ltd.

The Mackie Mill and Mercantile Company are constructing a shingle mill at New Westminster with a daily capacity of 200,000. The same company already operate a mill at Gettysburg, Wash.

Port Moody, B.C.

Reports are current that the Shell Oil Company of California will construct a refinery at Port Moody, at which place the Imperial Oil Company, Limited, are just completing their big refining plant.

Vancouver, B.C.

The Taylor Belting Company, Limited, Vancouver, is to be taken over by Chicago interests, who will make extension in the scope and operations of the factory.

Further orders for military supplies have caused the Vancouver Knitting Company, Limited, to instal additional machinery, which practically doubles their output, and the factory is working twenty-four hours daily.

The Robertson and Hackett mill and three others in Vancouver and New Westminster will reopen February first, having received good orders for bridge timbers and car lumber for the Great Northern Railway for shipment to Middle West points.

Recent developments have demonstrated the necessity for the installation of a floating crane for Vancouver harbor, difficulty having been experienced in handling shipments of very heavy machinery recently put on board a Russian steamer for Vladivostok. Representations have been made to the Harbor Board. No definite outcome has been made public so far.

The letting of the contract for the second Narrows bridge across Burrard Inlet has again been deferred, the report of the consulting engineer, Mr. Modjeski, upon the three competing plans having shown that each required considerable modification before a contract could be let. It is probable that new plans will be drawn and fresh tenders called, but a strong faction is endeavoring to have the contract awarded to the Western Foundations Co. of Vancouver, in conjunction with local steel fabrication works. The matter is now under the consideration of the Provincial Government. The cost of the structure will be about $2,000,000.

The Dominion Shipbuilding, Engineering and Drydock Co., Ltd., who are constructing an extensive plant at North Vancouver, state that they propose to have their first unit in operation next year, comprising marine railways, foundry, boiler and machine shops and stores. During the second year they expect to complete the second unit comprising plate and frame-setting sheds and the installation of shipping berths, while during the third year it is the intention to complete the drydock scheme, involving the construction of a drydock 1,050 feet in length by 100 feet wide at the gates.

The total salmon pack of British Columbia for the season just closed was 1,111,039 cases, which is 242,862 cases less than the total pack of the bumper year of 1913. This figure exceeds by many thousand the pack of any previous "off" year, every fourth year being a "big" run. Practically one-half the pack consists of sockeyes, the choicest fish, the balance being 32,908 cases red springs, 16,420 white springs, 184,474 chums, 220,340 pinks and 120,291 cohoes.

Contract has been let by the Dominion Government for the construction of the government elevator at Vancouver, to Barnett and McQueen, at a price of $690,000. The elevator will be of concrete construction and equipped with the latest machinery and will be of 1,250,000 bushels capacity. Preliminary work is to start almost immediately.

Vernon, B.C.

The Coldstream Ranch, near Vernon, intend to erect a cider and vinegar plant at Vernon.

YOUR COMPETITOR Will get Many of Your CUSTOMERS

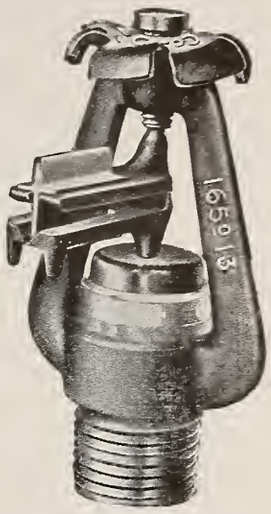
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Fire Insurance Companies reduce rates about 80% on sprinkler protected plants. Is this not a recognition of their efficiency and reliability?



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Or direct from the manufacturers,

DOMINION ABRASIVE WHEEL CO., LTD.

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The Canada Metal Co., Limited

Manufacture in Canada

Our Babbitt Metals Give Excellent Service



We are Proud of the Goods We Manufacture

FOR GENERAL MACHINERY BEARINGS

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THE BABBITT METAL WITHOUT A FAULT

WE HAVE EVERYTHING IN METALS

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Victoria, B.C.

The total mineral output of British Columbia for 1914 was $26,000,000, being $4,000,000 below last year, $1,250,000 of the decrease being due to the lower values of metals.

The lumber cut of the Mountain Lumber Association during 1914 was 225,000,000 feet, a drop of 140,000,000 feet from that of 1913. The figures for the Coast mills are not yet out.

The Cameron Lumber Company of Victoria have received an order for 4,000 tons of box shooks for shipment to Liverpool, via Panama Canal, this being the first business of the kind obtained, and the outcome of a shortage of Baltic shipments.

The Forestry Department reports the sale to the British Columbia Sulphite Fibre Co., Ltd., of 200,000,000 feet of timber for the company's plant on Howe Sound. This company have recently installed additional machinery, giving a fifty per cent. increased output, and are now producing 65 tons of sulphite pulp daily, working 24 hours per day, and employing nearly 400 men. The product is shipped mainly to Japan, South America and the Northwestern States.

The incorporation of the Pacific Mills, Ltd., with a capital of nine million, five hundred thousand dollars is a further step in the syndicate backed by the Fleischhacker interests of San Francisco to complete the purchase of the undertaking of the Ocean Falls Company, whose extensive plant has been closed down for the past two years. The old company were equipped to turn out mechanical pulp only, and the marketing of the product at a profit was found to be impracticable. The new company will install paper-making plant on a large scale.

Wild Horse Creek, B.C.

The Yankee Girl Mining Company is planning to construct a hydro-electric plant at Wild Horse Creek to supply their own requirements and also the town of Ymir.

NEW BRUNSWICK.

Hillsboro, N.B.

Mr. C. Allison Peck will purchase a hardwood flooring plant to be equipped with woodworking machinery to replace the woodworking factory which was destroyed by fire. A new engine to run rotary saw, also various parts of machinery which were destroyed, will be purchased.

Millerton, N.B.

The plant of the New Brunswick Pulp & Paper Company has been destroyed by fire. The loss, which was fully insured, is estimated at $150,000.

St. John, N.B.

A number of houses will be erected in the spring by the Colonial Construction Company, Limited, which was recently incorporated as a general construction company with a capital of $24,000.

ONTARIO.

Arnprior, Ont.

A by-law was carried to exempt the Arnprior Felt Company from certain taxes.

Barrie, Ont.

Contracts have not yet been let for plastering, painting, heating, plumbing and electrical work in connection with the construction of $57,000 drill hall for the Dominion Government Department of Public Works. Mr. R. C. Desrochers, Ottawa, is the secretary; Mr. W. A. Tom, Collingwood, is the general contractor.

Beaverton, Ont.

George Minorgan & Sons have been granted a loan of $6,000 without interest for six years for the purpose of extending their business.

Berlin, Ont.

The Regal Automobile Company are in the market for a large quantity of machinery for the addition to be built to their factory in the spring. The manager at Berlin is Mr. Nyberg, Galt, Ont.

Brantford, Ont.

Plans have been prepared for the new factory to be erected by the Brantford Scale Company.

Caledonia, Ont.

The Ebsary Fireproofing Company, Stevenson Building, will occupy their new mill shortly, and will manufacture gypsum blocks.

Chatham, Ont.

A by-law granting financial assistance to the Everlasting Casket & Vault Company has been passed.

Cobourg, Ont.

A by-law authorizing the issue of debentures for the raising of $50,000 in aid of the Federal Steel & Foundry Company, Limited, for the establishment of a manufactory of steel and iron products, forgings and castings has been carried.

Essex, Ont.

A by-law granting concessions to the Essex Canning and Preserving Company has been carried.

Ford City, Ont.

The new factory of the Ford Motor Company of Canada is well advanced on the way to completion.

Fort William, Ont.

Contracts have been let for the construction of concrete docks at the Canadian Northern coal and ore docks at Port Arthur, and work will be commenced as soon as the lake freezes over so as to allow the heavy equipment to be moved out upon the ice.

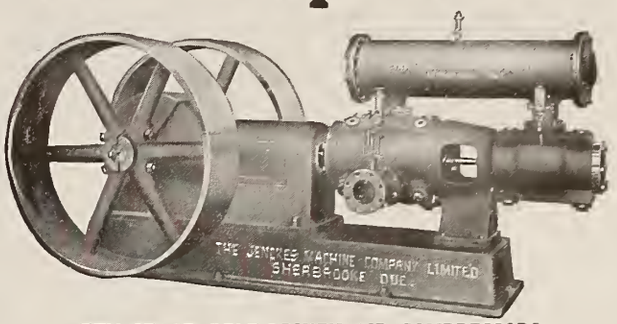
Galt, Ont.

The Canada Machinery Corporation, Limited, contemplate making extension to their plant.

A factory is to be erected by the Union Metal Manufacturing Company, Canton, Ohio, for the manufacture of electric light standards, ornamental metal posts, etc.

A by-law has been passed granting to the Galt Machine Screw Company $15,000 for the purpose of erecting a new machine shop. The work will be started in the spring.

Air Compressors



TWO-STAGE, BELT-DRIVEN AIR COMPRESSORS

EFFICIENT, RUGGED

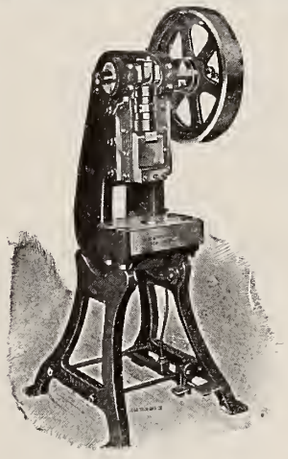
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Polarine assures freedom from breakdowns and easy motoring under all conditions of load and temperature.

The Imperial Oil Co.,
Limited

TORONTO WINNIPEG MONTREAL
ST. JOHN HALIFAX

Guelph, Ont.

The Provincial Government are contemplating the erection of an abattoir here at an estimated cost of $40,000.

Hagersville, Ont.

The sub-contract for roofing the drill hall for the Department of Militia and Defence has been awarded to the Asbestos Manufacturing Company, Limited, Lachine. The contract for interior fitting has not yet been let. W. A. Tom Construction Company, Collingwood, has the general contract.

Hamiton, Ont.

Tenders are now being received by the Dominion Power Transmission Company for the roofing of their steam plant.

An extension is being built to the factory of the Chipman & Holland Knitting Company.

A new factory will be built by the MacGregor Shirt Company at a cost of $30,000.

Proctor and Gamble, of Cincinnati, are erecting a large factory in Hamilton for the manufacture of soap, and it will go into operation about August 1st and will employ about 300 people. Machinery for the $1,000,000 soap factory building for this company will be purchased by Mr. A. Anderson, in care of owners, Ivorydale, Ohio.

Huntsville, Ont.

A by-law fixing the assessment on the Anglo-Canadian Leather Company's plant has been carried.

Kincardine, Ont.

Committees of the Board of Trade have received a proposition from Mayor Mitchell regarding the establishment of a factory for the manufacture of woollen articles.

Kingston, Ont.

The City Council has granted permission to the Gananoque Electric Light and Water Supply Company to bring power into the city for the purpose of operating the flour mills of the Kingston Milling Company.

Listowel, Ont.

Fire destroyed the planing mill, stable and coal and wood sheds of Mr. Oliver Ellis Wallace.

Mount Forest, Ont.

A by-law fixing the assessment and providing free water to the Frett Company has been carried.

Ottawa, Ont.

Messrs. Barrett Bros. will rebuild their lumber mill, which was recently destroyed by fire.

The contract has been secured by the Canada Electric Company, Montreal, for electrically equipping the new Customs house here.

Work has been commenced on the new $25,000 five storey building of Syndicat D'Oeuvres Sociales. When completed this building will be leased by Le Temps Printing Company.

W. Nixon, Slater St., will require refrigerating machinery for the extension that is being built to his candy factory.

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Are you sincere in your desire to boost and make greater the British Empire by the buying of Canadian made goods? If so, look over the following list of high-grade oils, greases, compounds and paints manufactured in our oil refinery at Petrolia and our paint works at Toronto, Ontario. A postal card from you will bring you full information regarding the goods in which you are interested.

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DYNAMO OIL
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BLACK LEATHER OIL
PARRAFINE WAX
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READY MIXED PAINT
COLORS IN OIL
VARNISHES
BLACK JAPANS
STEEL BRIDGE PAINTS
ROOFING PAINTS
CUP GREASE
LINSEED OIL SOAP

Sarnia, Ont.

A new grain elevator will be erected by the G. T. R. at Point Edward.

The Sarnia Sheet Metal Products Company, Limited, have completed their new $20,000 sheet metal factory, and the building is now ready for installing machinery.

One hundred and twelve thousand, eight hundred and fourteen dollars has been raised by the City of Sarnia to be expended on the purchase of the Port Huron Thresher Works, which site is required by the Grand Trunk Railway Company for the location of their car shops at Port Huron.

It has been decided to merge the two large oil concerns, which were purchased by the Imperial Oil Company in Peru, into one, to be known as the International Petroleum Company, with headquarters in Toronto.

Toronto, Ont.

The Hamilton Bridge Works, Hamilton, Ont., have been awarded the contract for the steel work in connection with the Don section of the Bloor Street Viaduct, at $400,000.

Mr. Fox, Toronto Branch Manager of the Ford Motor Company, at a recent meeting of the Ford Efficiency Club made the welcome announcement that there will be a general increase in the wages of all employees of the Company in Toronto. He also stated that no workmen were laid off during the period of depression and that further, their intention was to take on new hands.

The factory building owned by the Princess Garment Company and the Auto Strop Safety Razor Company, Limited, have been damaged by fire to the extent of $20,000.

THE LOW COST OF EFFICIENCY

The men who get ***results*** don't permit first cost to control their selection of equipment.

Hoisting, Excavating, and Material-Handling Plant of

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Hoisting Engines, Steel Derricks, Derrick Fittings, "Faivrette" Clamshells, Centrifugal Pumps.

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CERTAINLY, but think for a moment what this means. It means that the great objection to steel construction is removed; that the alarming and dangerous condition of some of the early built structures need not be repeated; and that architects and builders when they specify or use steel construction coated with Bitunamel have a material that experience has proved to be absolutely impervious to rust.



It is gas, acid and alkali proof, and is employed on many large ocean liners as a protection against the action of salt water.

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BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.

ACETYLENE WELDING APPARATUS
*L'Air Liquide Society, Montreal, Que.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.
Hough Lithographing Co., Ltd., Toronto.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

AIR WASHERS
*The Canadian Service Co., Windsor, Ont.

ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE
E. L. Drewry, Winnipeg, Man.

ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

ALUMINUM CASTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS
*T. Pringle & Sons, Montreal.

ASBESTOS:
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS BUILDING LUMBER
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CEMENT SHINGLES
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS CORRUGATED SHEATHING
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS MILLBOARD
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS PRODUCTS;
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS ROOFING SLATES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ASBESTOS SHEATHING:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
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*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS THEATRE CURTAINS:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian Asbestos Co.

ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.

AUTOMOBILE PARTS
*Dominion Stamping Co., Walkerville, Ont.

AUTOMATIC MACHINERY
*The Ford-Smith Machine Co., Ltd., Hamilton.

AUTOMATIC SPRINKLERS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

AWNINGS
*Smart-Woods, Ltd., Montreal.

AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS
*Smart-Woods, Ltd., Montreal.

BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal, Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN
*Berry Bros., Ltd., Winnipeg, Man.

BALL BEARING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

BANK AND OFFICE RAILINGS
*The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS and CAGES:
*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Toronto.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
The Goldie & McCulloch Co., Ltd., Gadt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville, Ont.
*Smart-Woods, Ltd., Montreal.

BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER
E. L. Drewry, Winnipeg, Man.

BELT FASTENERS
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELT DRESSING:
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Dominion Belting Co., Ltd., Hamilton, Ont.

BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
J. L. Goodhue & Co., Danville, P.Q
*Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Limited.

BELTING (stitched cotton duck)
*Dominion Belting Co., Ltd., Hamilton, Ont.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS
Samuel May & Co., Toronto.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:
*A. C. Leslie & Co., Montreal.

BLANK BOOKS:
*Morton, Philips & Co., Montreal.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford, Ont.
*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.

BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS
*Canadian H. W. Johns-Manville Co., Toronto.
Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Canadian Allis-Chalmers, Limited, Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*E. Leonard & Sons, London, Ont
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Jenckes Machine Co., Sherbrooke.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, heating:
*The Goldie & McCullough Co., Ltd. Galt.

BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.

BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BOILER STANDS
Anthes Foundry Ltd., Toronto.

BOLSTERS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:
*The National Acme Mfg Co., Montreal.

BOLT CUTTERS:
*Canada Machinery Corporation, Galt.

BOLTS AND NUTS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co. Ltd., Stratford, Ont.

BOOKLETS
Stone Limited, Toronto.
R. G. McLean, Toronto.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,
Ames-Holden-McCready, Ltd., Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

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BOWLING ALLEYS
Samuel May & Co., Toronto.

BOXES, cellular board:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
G. & J. Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAIDS AND TRIMMINGS
The Moulton Mfg. Co., Ltd., Montreal.

BRAKE SHOES
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS GOODS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
*Tallman Brass & Metal Co., Hamilton.

BRASS PLATES
Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS
Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

BRICK
National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway
*Canada Foundry Co., Ltd., Toronto.
Canadian Allis-Chalmers Ltd., Toronto.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters
Geo. Booth & Son, Toronto.

BROOMS
*Boeckh Bros. Co., Ltd., Toronto.
H. W. Nelson & Co., Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:
*Boeckh Bros., Ltd., Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd. Toronto.

BUCKET TANKS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUFFING and Polishing Machinery.
*The Ford-Smith Machine Co., Ltd., Hamilton.

BUILDING
Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed
Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING GRANITE
McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE:
*Northern Electric Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:
*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS
Hough Lithographing Co., Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CALENDARS, ADVERTISING NOVELTIES, etc.
Rolph & Clark, Ltd., Toronto.

CAMERAS
Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.
American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

CANVAS
*Smart-Woods, Ltd., Montreal.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PAPER:
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

CARBON PRODUCTS
Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
Canada Carbide Co., Ltd., Montreal. Que.

CARDBOARD
Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS
Toronto Carpet Mfg Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.
*Richard-Wilcox Canadian Co., Limitd, London, Ont.

CARRIERS, box and barrel
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*Wm. & J. G. Greey, Toronto.

CARS, industrial:
*Wm. & J. G. Greey, Toronto.
*Sheldons, Ltd., Galt.

CARTONS, lithographed
Harris Lithographing Co., Toronto.

CASEMENTS, steel
*Herbert Morris Crane & Hoist Company, Ltd.

CASTINGS:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

CASTINGS, brass and bronze:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Record Foundry and Machine Co., Moncton, N.B.
*Wm. & J. G. Greey, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:
*Galt Malleable Iron Co., Ltd Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CAST IRON PIPE:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.

CATALOGUE MAKERS
Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIN BLOCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Herbert Morris Crane & Hoist Company, Ltd.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS
Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO
Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel
The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S
*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Canadian H. W. Johns-Manville Co., Toronto.
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal. Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

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CLUTCHES, conveyors.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.
COATS
Peerless Overall Co., Rock Island. Que.
COBALT OXIDE
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.
COCOA AND CHOCOLATE PREPARATIONS
Walter Baker & Co., of Canada, Ltd., Montreal, Que.
COFFEE
S. H. Ewing & Sons, Montreal, Que.
COFFEE IMPORTERS, Roasters and Manufacturers
C. H. Cochrane & Co., Ottawa, Ont.
COLD DRAWN SCREW STEEL:
*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD DRAWN SHAPES, flats, squares and hexagons:
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.
COLLAR BUTTONS
The Arlington Co., of Canada, Ltd., Toronto.
COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.
COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.
COLLARS AND CUFFS waterproof
Williams, Greene & Rome, Berlin, Ont.
COLORS
Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin Williams Co. of Canada. Ltd., Montreal, Que.
COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto.
COMMERCIAL STATIONERS
Rolph & Clark, Ltd., Toronto.
COMMERCIAL STATIONERY:
*Brown Bros,, Ltd., Toronto.
*Morton, Phillips & Co., Montreal.
COMPRESSORS
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
CONCENTRATORS:
*Jenckes Machine Co., Sherbrooke.
CONCRETE COATINGS, paints, etc.
The Imperial Varnish & Color Co., Ltd., Toronto.
CONDUITS FOR INTERIOR WIRING
*Conduits Company, Ltd., Toronto.
CONFECTIONERY
Ganong Bros., Ltd.. St. Stephens. N.B.
Moirs, Limited. Halifax. N.S.
The Montreal Biscuit Co., Montreal, Que.
CONTRACTORS' PLANT
The Western Steel & Iron Co., Ltd., Winnipeg, Man.
*M. Beatty & Sons, Ltd., Welland, Ont.
CONVEYORS:
*Dodge Mfg. Co.. Ltd.. Toronto.
*Wm. & J. G. Greey, Toronto.
*Jenckes Machine Co., Sherbrooke.
COOLING APPARATUS
*The Canadian Service Co., Ltd., Windsor, Ont.
COPPER:
*Eugene F. Phillips. Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
COPPERSMITHS
*The Booth-Coulter Copper and Brass Co. Ltd.. Toronto.
COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd. Toronto.
*Booth-Coulter Copper & Brass Co., Ltd . Toronto.
COPPERWARE AND LANTERNS
Sheet Metal Products Co. of Canada. Ltd.. Toronto.
COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

CORKS
S. H. Ewing & Sons. Montreal, Que.
CORK BOARD INSULATION
*Robinson Bros. Cork Co., Ltd., Toronto.
CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.
CORK, granulated
*Robinson Bros. Cork Co., Ltd., Toronto.
CORRUGATED BOXES:
*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORRUGATED PAPER:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.
CORSETS
Dominion Corset Co., Quebec, Que.
COTTONADES
Hamilton Cotton Co., Hamilton, Ont.
COTTON TEXTILES:
*Dominion Textile Co., Montreal.
COUPLERS
*Canadian Steel Foundries, Ltd. Welland, Ont.
COUPLERS, steel bar:
*Canadian Steel Foundries, Ltd., Montreal.
COUPLINGS:
*Dodge Mfg. Co.. Ltd.. Toronto.
*Wm. & J. G. Greey, Toronto.
CRANES:
*Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
CRANKSHAFTS
Canada Forge Co., Ltd., Welland. Ont.
CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.
CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Ltd. Montreal. Que.
CREAMERY AND CHEESE FACTOR MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Peterboro, Ont.
CREOSOTED MATERIALS:
*The Dominion Creosoting Co.. Ltd. Vancouver, B.C.
CRUSHED STONE
The Hagersville Contracting Co., Ltd., Hagersville, Ont.
CRUSHERS, rock.
*Canadian Allis-Chalmers, Limited, Toronto.
CRUSHING ROLLS:
*Jenckes Machine Co., Sherbrooke.
CUES
Samuel May & Co., Toronto.
CUFFS
The Standard Shirt Co.. Ltd., Montreal, Que.
CUPOLAS,
*Sheldons, Ltd.. Galt
The Northern Crane Works, Ltd., Walkerville.
CUPS, presentation
Standard Silver Co.. Toronto.
CUPS, grease and oil
*The Canadian Winkley Co., Ltd., Windsor, Ont.
CURLED HAIR
Delany & Pettit, Ltd., Toronto.
CURTAINS, chenille
Hamilton Cotton Co.. Hamilton. Ont.
CUTLERY
Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.
DENIMS
Hamilton Cotton Co.. Hamilton, Ont.
DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
DESIGNERS
Ontario Engraving Co., Hamilton. Ont.
DESIGNERS and PRINTERS OF BOOKLETS, ETC.
Grip. Ltd.. Toronto.
DINING ROOM SUITES
The George McLagan Furniture Co., Limited. Stratford. Ont.
DIES
*Butterfield & Co., Rock Island, P.Q.
DISC GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.
DISINFECTING APPARATUS
Spramotor Co., London, Ont.

DOOR HANGERS
*Canadian Allis-Chalmers, Ltd., Toronto.
*Richards Wilcox Canadian Co., Ltd., London, Ont.
DRAPERY AND UPHOLSTERY GOODS
Daly & Morin, Montreal, Que.
DREDGES
*M. Beatty & Sons, Ltd., Welland, Ont.
DRESSING, belt
Sadler & Haworth, Montreal, Que.
DRESS AND CLOAK TRIMMINGS
J. Henry Peters Co., 1 Mincing St., Toronto.
DRILLS:
*Canada Machinery Corporation, Galt.
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.
DRILLS, rock
*Canadian Allis-Chalmers, Ltd., Toronto.
DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.
DROP FORGINGS:
*Canadian Billings & Spencer, Ltd., Welland.
DROP HAMMERS:
*Canada Machinery Corporation, Galt.
DRY BATTERIES
*Northern Electric Co., Ltd., Montreal, Que.
DRY CELLS, electric
Canadian Carbon Co., Ltd., Toronto.
DRY COLORS
P. D. Dods & Co., Ltd., Montreal, Que.
The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co.. Ltd., Windsor, Ont.
DRY KILN EQUIPMENT
*The Canadian Service Co., Ltd., Windsor, Ont.
DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto.
DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.
DYERS AND FINISHERS
R. Parker & Co., Toronto.
DYNAMITE
Canadian Explosives Ltd., Montreal, Que.
DYNAMOS.
*Canadian General Electric Co., Ltd., Toronto.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.
EIDERDOWN
Galt Knitting Co.. Ltd.. Galt.
ELECTRIC APPLIANCES.
*Canadian Crocker-Wheeler Co.. Ltd., St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co.. Ltd Hamilton.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC BATTERIES.
*Canadian General Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd. Montreal. Que.
ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co.. Ltd., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.
ELECTRIC INSULATED WIRE
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRIC LAMPS.
*Canadian General Electric Co., Ltd., Toronto.
*Packard Electric Co.. Ltd.. Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

ELECTRIC PLATE WARE
Roden Bros.. Ltd., Toronto.
ELECTRIC BATTERIES
Canadian Carbon Co., Ltd., Toronto.
ELECTROTYPING
Central Press Agency. Toronto.
ELECTRICAL SUPPLIES
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Crouse-Hinds Co. of Canada, Toronto.
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*Jones & Moore Electric Co., Ltd.. Toronto.
*Munderloh & Co., Montreal.
*Northern Electric Co., Ltd., Montreal, Que.
ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto.
ELEVATORS:
*Jenckes Machine Co., Sherbrooke.
Turnbull Elevator Mfg. Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.
ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford.
ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd.. Toronto.
ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.
ELEVATORS, hydraulic and electric
John McDougall Caledonian Iron Works Co.. Ltd.. Montreal. Que.
EMERY DRESSERS and STANDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY WHEEL GUARDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
EMERY WHEEL Safety Flanges
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.
ENAMELED KITCHENWARE:
*The Davidson Mfg. Co., Ltd.. Montreal.
ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor. Ont.
ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.
ENGINES
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*The John Inglis Co., Ltd., Toronto.
*International Engineering Works, Ltd., Amherst, N.S.
*Sheldons, Ltd., Galt.
*The Waterous Engine Works Co., Ltd.. Brantford.
ENGINES, gas and gasoline
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Massey-Harris Co.. Ltd., Toronto.
ENGINES, gasoline tractor plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Limited, Montreal.
ENGINES, hoisting
*M. Beatty & Sons, Welland.
*Waterous Engine Works Co., Ltd., Brantford.
ENGINES, marine gasoline
*Canadian Fairbanks-Morse Co., Limited, Montreal.

*For Display Advertisement, See Index, Page 663

ENGINES, steam plowing and threshing
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.
Rolph & Clark, Ltd., Toronto.
Stone, Limited, Toronto.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.
Hough Lithographing Co., Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote
American Bank Note Co., Ottawa, Ont.

ENGRAVING:
*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons Aurora, Ont.

ENVELOPES
Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

ESCUTCHEON PINS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR
Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS
Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto.

EXPLOSIVES, high
Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.
J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

FASTENERS, belt
Sadler & Haworth, Montreal, Que.

FENCES and GATES:
*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire
Banwell Hoxie Wire Fence Co., Hamilton, Ont.

FENCES, iron
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

FENCING, wire
The Great West Wire Fence Co., Ltd., Winnipeg, Man.
C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:
*The E. B. Eddy Co., Ltd., Hull.

FILES
Henry Disston & Sons, Ltd., Toronto.
*The Nicholson File Co., Port Hope, Ont.

FIRE ALARM APPARATUS
*Northern Electric Co., Ltd., Montreal, Que.

FIRE DOOR HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:
*Waterous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:
*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS
*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.
*Canadian H. W. Johns-Manville Co., Toronto.
*The General Fire Equipment Co. Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford.

FIRE HOSE
*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.
Dunlop Tire and Rubber Goods Co., Limited, Toronto.
*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The Rockwood Sprinkler Co., of Canada, Ltd., Montreal, Que.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FIREPROOF WINDOWS and DOORS:
*A. B. Ormsby, Ltd., Toronto.
*Geo. W. Reed & Co., Montreal.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King, Ltd., Montreal, Que.

FLAGS
*Smart-Woods, Ltd., Montreal.

FLASHLIGHTS
Canadian Carbon Co., Toronto.
Northern Electric Co., Ltd., Montreal, Que.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLOUR MILL MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.

FLUE LINERS
Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
*Sheldons, Ltd., Galt.

FORGINGS
Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton.

FORGINGS, DROP
*Dominion Stamping Co., Walkerville, Ont.

FOUNDRY EPUIPMENT
The Northern Crane Works, Ltd., Walkerville.
*The Ford-Smith Machine Co., Ltd., Hamilton.

FOUNTAIN FRUITS and Juices
J. J. McLaughlin. Ltd., Toronto.

FRICTION CLUTCH PULLEYS:
*Dodge Mfg. Co., Ltd., Toronto.

FRICTION HOISTS
*Herbert Morris Crane & Hoist Company, Ltd.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal. Que.

FUR TRIMMINGS, ornaments and buttons
J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville. Ont.

FURNACES, hot air
Bedford Stove Co., Bedford, Que.

FURNITURE, hall
The George McLagan Furniture Co., Ltd Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock. Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd., Preston. Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford. Ont.

GALVANIZED IRON:
*A. C. Leslie & Co., Montreal.

GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
*The Waterous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground
S. F. Bowser & Co., Toronto.

GASOLINE
*The Imperial Oil Co., Ltd., Toronto.

GAS PRODUCERS:
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

GENERATORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.
*International Engineering Works, Ltd., Amherst, N.S.

GENERATORS, electric
*Canadian General Electric Co., Ltd., Toronto.

GINS
The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd. Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co Ltd., Toronto.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
Toronto Plate Glass Importing Co. Ltd., Toronto.

GLOVES AND MITTS
A. R. Clarke & Co., Ltd., Toronto

GLUE
Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.

GRATES.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*International Engineering Works, Ltd., Amherst, N.S.

GRAVITY CARRIERS
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co. Limited. Stratford, Ont.

GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal
*Northern Electric Co., Ltd., Montreal, Que.

GYPSUM, crushed
*Albert Mfg. Co., Hillsborough, N.B

GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HACK SAW FEEDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville. Ont

HARDWOOD FLOORING
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH
Wilson Bros. Ltd., Collingwood. Ont.

HARDWOOD VENEER DOORS TO DETAIL
Wilson Bros., Ltd., Collingwood. Ont.

HARNESS
Lamontagne Ltd., Montreal, Que.

HATS, men's straw
The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope
The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS
*The Canadian Sirocco Co., Windsor, Ont.
*E. Leonard & Sons, London, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:
*The Goldie & McCullough Co., Ltd., Galt.

HEATING APPLIANCES:
*Sheldons, Ltd., Galt.
*Northern Electric Co., Ltd., Montreal, Que.

HEATING SYSTEMS
Gurney Foundry Co., Ltd., Toronto.

HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

HINGES:
*The Steel Co. of Canada, Ltd., Hamilton.

HOISTS
*Northern Crane Works, Ltd., Walkerville, Ont.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.
The Northern Crane Works, Ltd., Walkerville.
*Herbert Morris Crane & Hoist Company, Ltd.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston. Ont.

HOSE, rubber.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

HUMIDIFIERS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES
Bawden Machine Co., Ltd., Toronto.

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ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

ILLUMINATED SIGNS
Geo. Booth & Son, Toronto.

INCUBATORS & BROODERS
Lee Mfg. Co., Ltd., Pembroke, Ont.

INJECTORS, automatic and autopositive
Penberthy Injector Co, Ltd. Windsor. Ont.

INSULATED WIRE
*Canadian General Electric Co., Ltd.. Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

INSULATION. patent seamless cork
*Canadian H. W. Johns-Manville Co., Toronto.
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS
Standard Clay Products, Ltd., St. Johns, Que.

IRON:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar
Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.
*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:
*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY
A. R. Whittall, Montreal.

JAM, canned goods, etc.
E. D. Smith & Son, Limited.

JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.

JOINTERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

JELLY POWDER
S. H. Ewing & Sons. Montreal. Que.

JEWELRY, enamelled souvenir
Caron Bros., Montreal, Que.

JEWELRY, gold filled
Caron Bros., Montreal, Que.

KELSEY WARM AIR GENERATOR
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:
*Sheldons. Ltd., Galt.

KINDLING
Standard Fuel Co., Toronto.

KNIFE GRINDERS:
*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:
*Penman's, Ltd., Paris, Ont.

KNIVES
*E. C. Atkins & Co., Hamilton.
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.

KRAFT, brown paper:
*The New Brunswick Pulp & Paper Mfg. Co., Ltd., Millerton, N.B.

LABELS
Lawson & Jones Ltd., London, Ont.

LABELS, lithographed
Harris Lithographing Co., Toronto.

LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
Sadler & Haworth, Montreal, Que.

LACE, leather:
*The D. K. McLaren Belting Co.. Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LAGER
E. L. Drewry, Winnipeg, Man.

LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:
Canadian Billings & Spencer Ltd., Welland.

LATHES
*Canada Machinery Corporation, Ltd., Galt, Ont.

LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD
* The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET
Toronto Plate Glass Importing Co., Ltd.. Toronto.

LEAD PIPE
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER
The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole
The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather
A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.
Clarke & Clarke, Limited, Toronto.

LEATHER, upper
A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED TIN WARE:
*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Company, Ottawa, Ont.
Hough Lithographing Co., Ltd., Toronto.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited Toronto.
Rolph & Clark Ltd., Toronto.

LOCKERS:
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene. Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:
*Asbestos Mfg. Co., Ltd.. Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, decking and planking
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).

LUMBER, Douglas fir (Oregon pine)
Canadian Western Lumber Co.. Ltd., Fraser Mills, B.C.

LUMBER, long timbers and spars
Canadian Western Lumber Co.. Ltd., Fraser Mills, B.C.

LUMBER, pickets and lath
Canadian Western Lumber Co.. Ltd., Fraser Mills, B.C.

LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, staves and heading
Canadian Western Lumber Co.. Ltd., Fraser Mills, B.C.

LUMBER, white pine
Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

MACHINERY, conveying.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co.. Montreal.
The Northern Crane Works, Ltd., Walkerville.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.

MACHINERY, elevating.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
*Wm. & J. G. Greey, Toronto.

MACHINERY, elevating and conveying:
*Wm. & J. G. Greey, Toronto.

MACHINERY, flour mill:
*The Goldie & McCullough Co.. Ltd., Galt.
*Wm. & J. G. Greey, Toronto.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY GUARDS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MACHINERY, hoisting, etc.
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works. Ltd.. Toronto.
J. & R. Weir. Montreal. Que.
*Wm. & J. G. Greey, Toronto.
*Herbert Morris Crane & Hoist Company, Ltd.
*M. Beatty & Sons, Ltd., Welland, Ont.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
*The Waterous Engine Works Co.. Ltd., Brantford.

MACHINERY, pumping
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car shop
*Canada Machinery Corporation, Ltd., Galt, Ont.
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
Sawyer-Massey Co.. Ltd.. Hamilton, Ont.
*Waterous Engine Works Co., Ltd.. Brantford.

MACHINERY, sawmill
*Canada Machinery Corporation, Ltd., Galt, Ont.
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene, Ont.
W. P. Plant, Hastings. Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, special
Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery
W. P. Plant, Hastings. Ont.

MACHINERY, transmission
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

MACHINERY, wood working
*Canada Machinery Corporation. Ltd., Galt, Ont.
*Berlin Machine Works, Ltd., Hamilton.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:
*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting
Spramotor Co.. London, Ont.

*For Display Advertisement See Index Page 663

MAGNESITE
Canadian Carbonate Co., Ltd., Montreal, Que.

MAILING TUBES:
*Dominion Paper Box Co., Ltd., Toronto.

MALT:
*Hiram Walker & Sons, Ltd., Walkerville.

MANTELS, wood
W. A. Moore Co., Ltd., Meaford Ont.

MAPS AND MAP MOUNTING
The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MATCHES:
*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned
The Wm. Davies Co., Ltd., Toronto.

MECHANICAL DRAUGHT
*Canadian Sirocco Co., Windsor, Ont.

MEDICINES, patented and pharmaceutical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
Alonzo W. Spooner, Limited, Port Hope, Ont.

METAL CEILING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.

METAL, spinning and stamping
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SASH:
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville.

METAL SHINGLES:
*Metal Shingle & Siding Co., Ltd., Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.
*Pedlar People, Ltd., Oshawa, Ont.

METAL SIDING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS
Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)
Holt, Renfrew Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)
Holt, Renfrew, Ltd., Quebec, Que.

MONUMENTS
McIntosh Granite Co., Ltd., Toronto.

MORTISERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MOTOR CAR PARTS AND ACCESSORIES
*Northern Electric Co., Ltd., Montreal, Que.
*Russell Motor Car Co., Ltd., Toronto.

MOTOR-DRIVEN GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

MOTORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.

MOTORS, D.C.
*Canadian Crocker Wheeler Co., St. Catharines, Ont.
*Northern Electric Co., Ltd., Montreal, Que.

MOTORS, electric (alternating current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)
*Canadian General Electric Co., Ltd., Toronto.
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:
*The Canadian Fairbanks-Morse Co., Ltd., Montreal, Que.
*The Gramm Motor Truck Co., Ltd., Walkerville.

MOULDERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

MOULDINGS, metal
*Kawneer Mfg. Co., Ltd., Guelph, Ont.

NAILS:
*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAME PLATES
Patterson and Heward, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NITROGEN
*L'Air Liquide Society, Montreal, Que.

NUTS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

OAKUM, plumbers', Canadian Navy
Factory Waste and Metal Co., Montreal, Que.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.
*Wm. & J. G. Greey, Toronto.

OFFICE STATIONERY:
*The Montreal Lithographing Co., Ltd., Montreal.

OILS
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS
S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES
Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring
S. F. Bowser & Co., Toronto.

OIL COMPANIES
Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)
*British American Oil Co., Ltd., Toronto.

OILS, Petroleum
*The Imperial Oil Co., Ltd., Toronto.

OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

ORGANS
*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe
Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour
Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OSTRICH PLUMES
R. Parker & Co., Toronto.

OVENS, portable bake
Bedford Stove Co., Bedford. Que.
*Wm. & J. G. Greey, Toronto.

OVERALLS
Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS
Rosamond Woollen Co., Aimonte, Ont.

OVERHEAD RUNWAYS.
*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont

OXYGEN
*L'Air Liquide Society, Montreal, Que.

PACKING BOXES
Barchard & Co., Ltd., Toronto.

PACKING, engine:
Garlock Packing Co., Hamilton.

PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.

PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint and Varnish Co., Ltd., Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island, Que.

PAPER BOARDS
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, cover
Barber Paper & Coating Mills Ltd Georgetown, Ont.

PAPER, envelope
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building
Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp and Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, carbon
*Peerless Carbon and Ribbon Mfg. Co., Ltd., Toronto.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto
Barber Paper & Coating Mills, Ltd. Georgetown, Ont.

PAPER, coated box board
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, enamelled blotting
*Ritchie & Ramsay, Ltd., Toronto.
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, genuine Canadian kraft, glazed and unglazed
*The New Brunswick Pulp and Paper Co., Ltd., Millerton, N.B.

PAPER, gummed tapes
Gummed Papers, Ltd., Brampton, Ont.

PAPER, label
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER, ledger
*Rolland Paper Co., Ltd., Montreal, Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, wall
Stauntons, Ltd., Toronto.

PAPER, writing
The Toronto Paper Mfg Co., Cornwall, Ont.

PAPER, writing, high-grade
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER BOXES:
*Dominion Paper Box Co., Toronto.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Limited. Stratford, Ont.

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PATENTS
Fetherstonhaugh & Co., Toronto.
Ridout and Maybee, Toronto.

PATENT LITIGATION
Ridout and Maybee, Toronto.

PEAS AND BEANS FOR SEED
W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:
*Canada Wire & Iron Goods Co., Hamilton.
*Wm. & J. G. Greey, Toronto.

PERFORATED MUSIC ROLLS
The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS
Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.
*Gourlay, Winter and Leeming, Toronto.

PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.

PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

PIANOS, player
*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions
The Otto Higel Co., Ltd, Toronto.

PIANO STOOLS and BENCHES
*Goderich Organ Co., Goderich, Ont.

PICKLES
The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS
T. A. Lytle Co., Ltd., Toronto.

PIG IRON:
*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS, ETC.
Wilson Bros., Ltd., Collingwood, Ont.

PINS, society, emblems and Badges
Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:
*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

PIPES, culvert
Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer
Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings
Warden King Ltd., Montreal, Que.

PIPES AND TUBES, wrought merchant
*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off Machines
John H. Hall & Sons, Limited. Brantford, Ont.

PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:
*Berlin Machine Works, Ltd Hamilton.
*Canada Machinery Corporation Galt.

PLANING MILLS
G. & J. Esplen, Montreal, Que.

PLASTER, fireproofing
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER OF PARIS
*Albert Mfg. Co., Hillsborough, N.B.
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

PLASTER, hard wall
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land
*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:
*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS
J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:
Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES
Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain
Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar
Fernie Lumber Co., Ltd., Fernie. B.C.

POLISHING MACHINES
*The Ford-Smith Machine Co., Ltd., Hamilton.

PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence
Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS
Stone. Limited. Toronto.
Hough Lithographing Co., Ltd., Toronto.

POULTRY SUPPLIES AND MEDICINES
Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

POWER SWITCHBOARDS
*Northern Electric Co., Ltd., Montreal, Que.

PRESSES AND DIES
Brown Boggs Co., Ltd., Hamilton, Ont.

PRESSES, baling
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic
William R. Perrin & Co., Ltd., Toronto.
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer
William R. Perrin & Co., Ltd., Toronto.

PRESS POWER:
*Canada Machinery Corporation, Galt.

PRINTERS
Rous & Mann, Ltd., Toronto.
R. G. McLean, Toronto.

PRINTERS, catalogue:
R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.

PRODUCE
The Wm. Davies Co., Ltd., Toronto.

PROPRIETARY MEDICINES
Northrop & Lyman Co., Ltd., Toronto.

PROVISIONS
The Wm. Davies Co., Ltd., Toronto

PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*Jeffrey Mfg. Co., Montreal, Que.

PULP, Bleached Sulphite
The Edward Partington Pulp and Paper Co., St. John, N.B.

PULP, Sulphide
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PUMPS.
*Canadian Allis-Chalmers, Limited, Toronto.
*International Engineering Works. Ltd., Amherst, N.S.
Spramotor Co., London. Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

PUMPS, ammonia
*Bawden Machine Co., Ltd., Toronto.

PUMPS, boiler feed.
*Bawden Machine Co., Ltd., Toronto.
*Canadian Allis-Chalmers, Limited, Toronto.
*The Goldie & McCullough Co., Ltd., Galt.

PUMPS, centrifugal
*M. Beatty & Sons, Ltd., Welland. Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, iron
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, tar
*Bawden Machine Co., Ltd., Toronto.

PUMPS, turbine, and equipment
*Bawden Machine Co., Ltd., Toronto.

PUMPS (Turbine and reciprocating)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

PUMPS, turbines
*Canadian Allis-Chalmers, Ltd., Toronto.

PYJAMAS AND NIGHT ROBES
Williams, Greene & Rome, Berlin, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron:
*Dennis Wire & Iron Works Co., London.

RAILINGS, bronze
*Canadian Allis-Chalmers, Ltd., Toronto. Ont.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada. Ltd., Montreal. Que.

RAILWAY SUPPLIES.
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

RAILWAY TARIFF BINDERS
The Esdale Press Ltd., Ottawa Ont

READY-TO-WEAR GARMENTS, Ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
Pratt and Whitney Co. of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.
*Butterfield & Co., Rock Island, P.Q.

"REDWOOD" lager
E. L. Drewry, Winnipeg, Man.

REED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock. Ont.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions.
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT for concrete:
*Trussed Concrete Steel Co. of Canada, Ltd., Walkerville.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETS:
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

RIVETS, bifurcated and tubular
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ROLLERS, shade
Daly & Morin, Montreal, Que.

ROOFING, metal
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.

ROOFING, ready to lay
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
Dominion Bridge Co., Ltd., Montreal.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.
The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.

RUBBER GOODS.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto.

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

RYE
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

SADDLERY HARDWARE
*Dominion Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Canadian Fairbanks-Morse Co., Ltd., Toronto.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SAMPLE CASES
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.

SANDERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SANDPAPER
Delany and Pettit, Ltd., Toronto, Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
Canadian Salt Co., Ltd., Windsor Ont.

SANITARY PAPER TOWELS:
*E. B. Eddy Co., Ltd., Hull.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich. Galt. Ont.

SAWS, band:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt

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SAW ..., crosscut:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SAWS, crosscut and oand
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack:
*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

SAWS, specialties
*Victor Saw Works, Ltd., Hamilton, Ont.

SCALES
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, for weighing
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.

SCREENS:
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.
*Wm. & J. G. Greey, Toronto.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREWS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SHAFTING.
Canada Forge Co., Ltd., Welland. Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.
*Wm. & J. G. Greey, Toronto.

SHANTY BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SHEAR BLADES, iron
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING, asbestos corrugated:
*Asbestos Mfg. Co., Ltd., Montreal.
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHEET METAL WARE (iron galvanized and enamelled)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works. Ltd., Hamilten, Ont.

SHELLAC
*Berry Bros., Ltd., Winnipeg.

SHINGLES, asbestos cement:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHIRTS
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
Peerless Overall Co., Rock Island. Que.
John W. Peck & Co., Ltd., Montreal, Que.
The Standard Shirt Co., Ltd., Montreal, Que.

SHIRTS, workmen's
A. R. Clarke & Co., Ltd., Toronto

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOES, running and athletic
Ames-Holden-McCready, Ltd., Montreal, Que.

SHOOKS
Barchard & Co., Ltd., Montreal. Que.

SHOVELS, steam
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.

SIGNS
Geo. Booth & Son, Toronto.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

SILVERWARE
Toronto Silver Plate Co., Ltd., Toronto.
Standard Silver Co., Toronto.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto.

SINKS, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKATES, figure
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, genuine Acme
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, hockey
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, ice
Canada Cycle & Motor Co., Ltd., Toronto.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS:
*Metallic Roofing Co., Ltd., Toronto.

SLEIGHS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

SLIPPERS
Ames-Holden-McCready, Ltd., Montreal, Que.

SOAPS
J. Barsalou & Co., Ltd., Montreal. Que.

SOAP (soft, oil)
The Imperial Varnish & Color Co., Ltd., Toronto.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SOIL PIPE
Anthes Foundry. Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*The Canada Metal Co., Toronto.

SOLDER, wire and bar
*American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPARK PLUGS
Canadian Carbon Co., Ltd., Toronto.

SPECIAL MACHINERY
*The Ford-Smith Machine Co., Ltd., Hamilton.

SPIRAL CONVEYORS.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

SPLIT PEAS
H. Murton, Guelph, Ont.

SPIKES, railway and marine
Starr Mfg. Co., Ltd., Dartmouth, N.S.

SPIRITS
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto.

SPRAYERS
Spramotor Co., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal, Que.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriages and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*General Fire Equipment Co., Ltd., Toronto.
*Purdy, Mansell, Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

STAINS
R. C. Jamieson & Co., Ltd., Montreal, Que.

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPINGS
*Dominion Stamping Co., Ltd., Walkerville, Ont.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMP MILLS:
*Jenckes Machine Co., Sherbrooke.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM HAMMERS:
*Canada Machinery Corporation, Galt.

STEAM PIPE and BOILER COVERINGS, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*M. Beatty & Sons, Ltd., Welland. Ont.

STEAM SPECIALTIES:
*Sheldons, Ltd., Galt.

STEAM TRAPS
*Canadian Sirocco Co., Windsor, Ont.
*Canadian Morehead Manufacturing Co., Limited, Woodstock.

STEEL:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.

STEEL CASTINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

STEEL PEN STOCKS:
*Jenckes Machine Co., Sherbrooke.

STEEL RODS:
*The Steel Co. of Canada, Ltd., Hamilton.

STEEL SASH:
*Dennis Wire & Iron Works, Co., London.
*Henry Hope & Sons, Ltd., Toronto.

STEEL SECTIONS
*Kawneer Mfg. Co., Ltd., Guelph, Ont.

STEEL SHELVING:
*Dennis Wire & Iron Works. Co., London.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING
Central Press Agency, Toronto.

STOOLS AND BENCHES, piano and organ
*Otterville Mfg. Co., Ltd., Otterville, Ont.

STONE
The Corinthian Stone Co., Guelph, Ont.
The Hagersville Contracting Co., Hagersville, Ont.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES
Tudhope-Anderson Co., Ltd., Orillia. Ont.
Bedford Stove Co., Bedford, Que.

STOVE BOARDS
Sheet Metal Products Co. of Canada, Ltd., Toronto.

STOVE LININGS
Standard Clay Products, Ltd., St. Johns, Que.

STOVES AND RANGES
Bedford Stove Co., Bedford, Que.
Gurney Foundry Co., Ltd., Toronto.
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont.

STRETCHERS, lace curtain
*Otterville Mfg. Co., Ltd., Otter-

STRUCTURAL STEEL
*Canadian Allis-Chalmers, Ltd., Toronto, Ont.
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*National Bridge Company of Canada, Ltd., Montreal, Que.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

SURFACERS:
*Berlin Machine Works, Ltd., Hamilton.
*Canada Machinery Corporation, Galt.

SWING GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

SWITCHBOARDS
*Canadian General Electric Co., Ltd., Toronto.
*The Canadian Independent Telephone Co., Ltd., Toronto.
*The Northern Electric & Mfg. Co., Ltd., Montreal.

SWITCHES, railway
Canadian Ramapo Iron Works, Ltd. Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS
*Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

SYSTEMS, OFFICE
*Autographic Register Co., of Canada, Montreal.

TABLES, billiard
Samuel May & Co., Toronto.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton. Ont.

TANKS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*E. Leonard & Sons, London, Ont.
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*International Engineering Works, Ltd. Amherst, N.S.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.

TAPS
Pratt and Whitney Co. of Canada, Dundas. Ont.
*Butterfield & Co., Rock Island, P.Q.

TAP WRENCHES
*Butterfield & Co., Rock Island, P.Q

TAPES, measuring
The Lufkin Rule Co., of Canada, Ltd., Windsor, Ont.

TAPES, paper and cloth, gummed and ungummed
Gummed Papers, Ltd., Brampton, Ont.

TELEPHONE ACCESSORIES
Canadian Independent Telephone Co., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

TELEPHONE APPARATUS
*The Canadian Independent Telephone Co., Ltd., Toronto.
*Northern Electric Co., Ltd., Montreal, Que.

*For Display Advertisement See Index, Page 663

TELEPHONES, Automatic
Canadian Independent Telephone Co., Toronto.

TENTS
Mackenzie & Co., Ottawa, Canada
Turner, J. J., & Sons, Peterborough, Ont.

TERRA ALBA
*Albert Mfg. Co., Hillsborough, N.B.

TERRA COTTA (architectural)
Toronto Plate Glass Importing Co., Ltd., Toronto.

TEXTILES
*Dominion Textile Co., Ltd., Montreal, Que.

THEATRE CURTAINS, asbestos:
*Asbestos Mfg. Co., Ltd., Montreal.
*Canadian H. W. Johns-Manville Co., Toronto.

THUMB SCREWS:
*Canadian Billings & Spencer, Ltd., Welland.

TILING, interlocking rubber.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TIMBER:
*The B.C. Mills Timber & Trading Co., Vancouver, B.C.
James Sheppard & Son, Sorel, Que.

TIME CLOCKS
*International Time Recording Co., Toronto.
*W. A. Wood, Montreal.

TANNERS' SUPPLIES
McClary Mfg. Co., London, Ont.

TIN WARE (stamped, pierced, japanned and lithographed)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

TIRES, cycle, auto and truck.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Goodyear Tire & Rubber Co., of Canada, Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TOOL GRINDERS
*The Ford-Smith Machine Co., Ltd., Hamilton.

TRADE MARKS AND DESIGNS
Ridout & Maybee, Toronto.

TRANSFORMERS
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
*Canadian General Electric Co., Ltd., Toronto.

TRANSFORMERS, power
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TOOLS, sheet metal workers
Brown Boggs Co., Ltd., Hamilton, Ont.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton. Ont.

TRANSMISSION MACHINERY.
*Canadian Allis-Chalmers, Limited, Toronto.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

TROLLEYS.
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*Herbert Morris Crane & Hoist Company, Ltd.
*Richard-Wilcox Canadian Co., Limited, London, Ont.

TRUCKS
The Gurney Scale Co., Hamilton, Ont.
*Wm. & J. G. Greey, Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford.

TRUNKS
Lamontagne Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal, Que.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

TUBING, Brass and Copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Canadian Seamless Wire Co., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

Tubing, cold rolled welded
*Kawneer Mfg. Co., Ltd., Guelph, Ont.

TUBING, Gold and Silver
Canadian Seamless Wire Co., Toronto.

TURBINES, water.
*Canadian Allis-Chalmers, Limited, Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*International Engineering Works, Ltd., Amherst, N.S.

TURBINES, steam:
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
*International Engineering Works, Ltd., Amherst, N.S.

TURBINE AND RECIPROCATING PUMPS.
*The Bawden Machine Co., Limited, Toronto.

TWEEDS
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TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
Pratt and Whitney Co., of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

TYPEWRITERS:
*United Typewriter Co., Toronto.

TYPEWRITER RIBBONS
*Peerless Carbon & Ribbon Mfg. Co., Ltd., Toronto.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

UNIONS
*Dart Union Co., Ltd., Toronto, Ont.
*Otterville Mfg. Co., Ltd., Otterville, Ont.

UNDERWEAR TRIMMINGS
The Whitby Braid & Edging Co., Woodstock, Ont.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

VACUUM PUMPS
*The Bawden Machine Co., Limited, Toronto.

VALVES:
*Kerr Engine Co., Ltd., Walkerville.

VALVES, for steam and water
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
Jenkins Bros., Ltd., Montreal, Que.

VALVES, regrinding globe, angle cross checks, swing checks, etc.
Penberthy Injector Co., Ltd., Windsor, Ont.

VARNISHES
*Ault & Wiborg Co. of Canada, Ltd. Toronto.
Berry Bros., Walkerville, Ont.
*Dougall Varnish Co., Ltd., Monreal.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal.

VAULTS and VAULT DOORS:
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*The Goldie & McCullough Co., Ltd., Galt.

VENTILATING APPLIANCES:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

VENTILATING SYSTEMS
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Gurney Foundry Co., Ltd., Toronto.

VENTILATION SYSTEMS, electric
*Northern Electric Co., Ltd., Montreal, Que.

VENTILATORS:
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*John T. Wilson & Co., Toronto.
*Geo. W. Reed & Co., Montreal.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

VINEGAR
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

VISES:
*National Machinery & Supply Co., Ltd., Hamilton.

WAGONS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

WALL COPING
Standard Clay Products, Ltd., St. Johns, Que.

WALL PLASTER
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.

WASHERS:
*The Steel Co. of Canada, Ltd., Hamilton.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTES, wool and cotton
Factory Waste and Metal Co., Montreal, Que.

WATER-PROOF CEMENT COATING
Benjamin Moore & Co., Ltd., Toronto.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont.

WHEELS
*Canadian Car & Foundry Co., Ltd. Montreal, Que.

WHEELS, corundum
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, propeller, iron and steel
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, turbine, water.
*Canadian Allis-Chalmers, Limited, Toronto.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, water (impulse type)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WELDING PLANTS (autogenous)
*L'Air Liquide Society, Montreal, Que.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHISKS
H. W. Nelson & Co., Toronto.

WHISKY
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

WHISKY, Canadian Club
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE ENAMEL
*Berry Bros., Ltd., Winnipeg.

WHITE LEAD
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.

WINDMILLS
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*Ontario Wind Engine & Pump Co., Ltd., Toronto.

WINDOW SHADES
Daly & Morin, Montreal, Que.

WIRE
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*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Northern Electric Co., Ltd., Montreal, Quebec.
The Graham Nail Works, Toronto.

WIRE CLOTH
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRED GLASS:
*Metallic Roofing Co., Ltd., Toronto.
*A. B. Ormsby, Ltd., Toronto.

WIRE GUARDS
C. H. Johnson & Sons, Ltd., Montreal, Que.

WIRE, insulated electric:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

WIRE, weather proof:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE WORK
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*Canada Wire & Iron Goods Co., Hamilton.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.

WOOD
Standard Fuel Co., Toronto.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SPLIT PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Wm. & J. G. Greey, Toronto.

WOOL
H. V. Andrews, Toronto.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

WRAPPERS, book, bottle, etc.
*The Thompson & Norris Co., of Canada, Ltd., Niagara Falls, Ont.

WROUGHT PIPE:
*The Steel Co. of Canada, Ltd., Hamilton.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical
*The Canada Metal Co., Toronto.

*For Display Advertisement See Index Page 663

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Vol. XV., No. 8 MARCH, 1915 $2.00 per Year

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INDUSTRIAL CANADA



"ENTIRE CROP IS SOLD"

The entire apple crop of Canada has been sold.

Two months ago the buyers refused to buy; the growers refused to pick a great deal of the crop in the orchards.

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Then the Government took hold—and advertised. To take the place of foreign trade, the Government sought a greater demand at home.

IT ADVERTISED CANADIAN APPLES TO CANADIANS.

And Canadians responded—as they always do to skilful, well directed advertising.

The crop has been picked. The growers have sold it. Canada has saved millions of dollars worth of her greatest fruit product.

And to hundreds of thousand of Canadian homes the Canadian apple has brought health and nutriment. (*Ottawa Free Press—Oct., 1914.*)

The now famous "Apple Campaign" was planned, written and placed by

J. J. GIBBONS Limited

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Coronation Building MONTREAL Cable Address "GIBJAY," Toronto

119 West Wellington Street TORONTO

Tribune Building WINNIPEG Code—A.B.C. 5th Edition

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MALLEABLE IRON CASTINGS

The Pratt & Letchworth Company Limited

BRANTFORD ONTARIO

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Drop Forgings



Sheet Metal Work

General Stampings

Saddle Trees and Saddlery Hardware

WE are now manufacturing these lines for a number of Canadian firms filling war contracts. We are the Pioneers and the largest manufacturers of all steel saddle tree arches in Canada. :: ::

THE DOMINION STAMPING COMPANY
LIMITED
Walkerville, Ont.

QUALITY

"No good man did, or ever should encourage cheapness at the ruinous expense of *unfitness*, which is always infidelity, and is dishonorable to a man. If I want an article let it be genuine, at whatever price; if the price is too high for me, I will go without it, unequipped with it for the present,—I shall not have equipped myself with hypocrisy at any rate. This, if you will reflect, is primarily the rule of all purchasing and producing men."—*Thomas Carlyle.*

WHEN we commenced refining Crude Petroleum at our works, Ashbridge's Bay, Toronto, about seven years ago, we nailed our colors to the mast of QUALITY. That's why our different products have gained such an enviable distinction.

WE MANUFACTURE

GASOLENE	BENZINE	LAMP OILS
FUEL OIL	GAS OIL	PARAFFINE WAX
AUTOMOBILE OILS	GREASES	ASPHALTIC ROAD OILS

LUBRICATING OILS FOR STEAM, MOTOR AND ELECTRIC PLANTS

The BRITISH AMERICAN OIL CO. Limited

REFINERS

BRANCHES
Montreal, Ottawa, London

HEAD OFFICE
Lumsden Building, Toronto

WE MAKE **THAT GOOD OIL!**



DART UNION PIPE COUPLINGS

BRONZE AGAINST BRONZE AT JOINT

Never Leak
Require No Attention
Do Not Deteriorate
Always On The Job

You have no Expense Keeping Pipe Joints Right if they are Made with Dart Unions. Ask Your Jobber.

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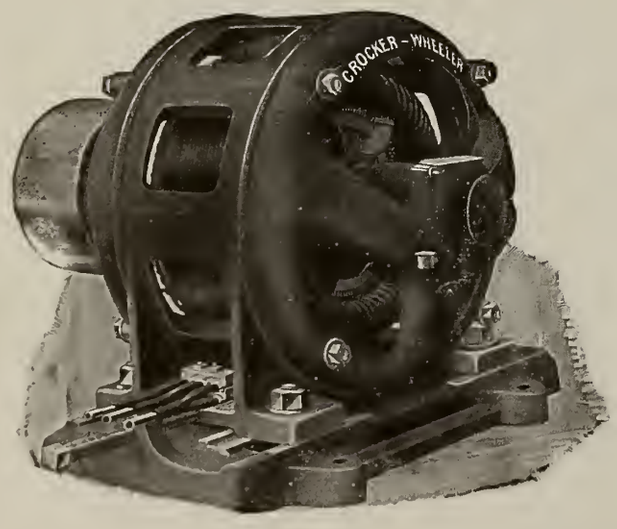
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CROCKER-WHEELER INDUCTION MOTORS

INCLUDES:

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features;
Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works: St. Catharines

District Offices: Montreal, Toronto, Vancouver

Go Out After Business

NOW is the time to get after business. There are still several millions of Canadians who are eating three meals a day, who are wearing boots and hats, and shirts and clothing. Someone has to supply all these. If you go out after this trade you will get it.

1,735,685 Canadians

Purchase millions of dollars worth of necessities every year—and you can reach that number every day in the year through an advertisement in the Street Cars of Canada. It will cost you only one dollar for every 48,000 you reach and an average of one cent from each of them would give you $480.00 worth of business every day in the year.

Remember, there are over 36 times 48,000 passengers carried daily on the street cars of Canada, and the proportion holds good throughout.

Write us to-day, as the space is limited and only a very few can get in during 1915.

Any of our offices will give you prompt attention.

THE CANADIAN STREET CAR ADVERTISING COMPANY, LIMITED

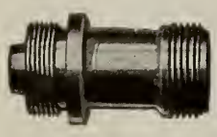
MONTREAL TORONTO WINNIPEG



Quality---In Every Piece of NAMCO Screw Machine Product

























Such service is yours for every kind of screw machine work up to 2¼in. diameter and 10½in. long. Just send us a sample or blue print and we'll furnish estimates—without charge.

STANDARD SCREWS AND NUTS in completely assorted stock are shipped the day your order is received.

This standard NAMCO Service covers:—"V" and U.S.S. Cap and Set Screws, A.L.A.M. Cap Screws, A.L.A.M. Nuts all styles, "V" Semi-finished Nuts and Hexagon Brass Nuts. Studs threaded to order promptly.

"Canadian Products" shows 200 special jobs that we've made. A post-card from you brings it.

"Milled Screws" lists the standard stock. Also send for a post-card.

THE NATIONAL-ACME MANUFACTURING CO.

MONTREAL P.Q.

IN ST. HENRI AT G.T.R.



How to Obtain Better Business

A large number of Canadian Manufacturers have stated openly that improved conditions in their businesses are directly attributable to the *"Made-in-Canada" Campaign.*

In fact some Canadian Manufacturers, whose goods have been made known to the Consumer through advertising, have enjoyed better business during the past few months than during the same period in 1913.

THIS IS BECAUSE

the public has been familiarized with the names and qualities of the products and the fact that they are "Made-in-Canada," and is thus in a position to ask definitely for certain goods when buying, instead of having to make general enquiries.

If you are a regular Advertiser possibly our ideas as to how you can best take full advantage of the "Made-in-Canada" Campaign, which we are handling, would be helpful.

If your customers are restricted to a limited class possibly we could show you how inexpensively you can tie your proposition up with the general "Made-in-Canada" movement.

If you are not an Advertiser and your product has advertising possibilities, aside from the "Made-in-Canada" movement we might be able to suggest a method of development on conservative lines, which would appeal to you.

On request we will be glad to make a study of your particular needs and to submit complete plans and estimates.

Address nearest office.

A. McKim Limited

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1. Has more money invested in drill making equipment than any other company in Canada.

2. Carries the largest stock of drills in Canada, and

3. Makes drills of as high quality as are made anywhere in the world.



Ask your jobber for them or write us.

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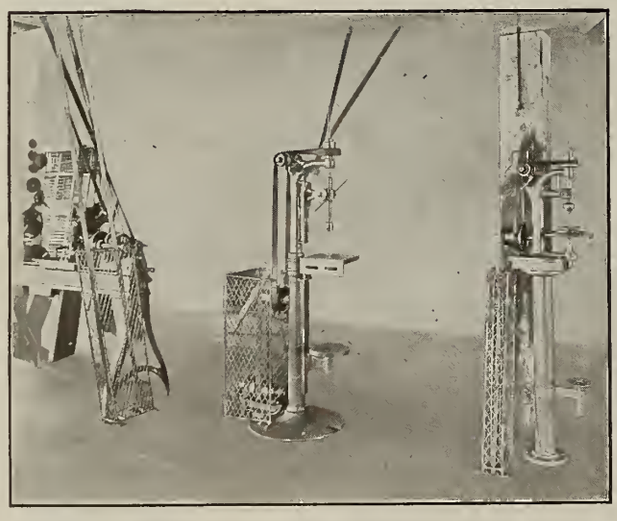
WALKERVILLE - - - ONTARIO

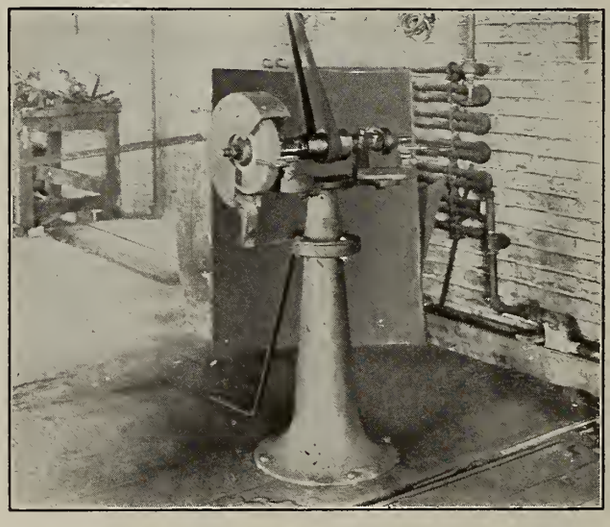
IT IS THE HAZARD THAT COUNTS IN WORKMEN'S COMPENSATION RATES

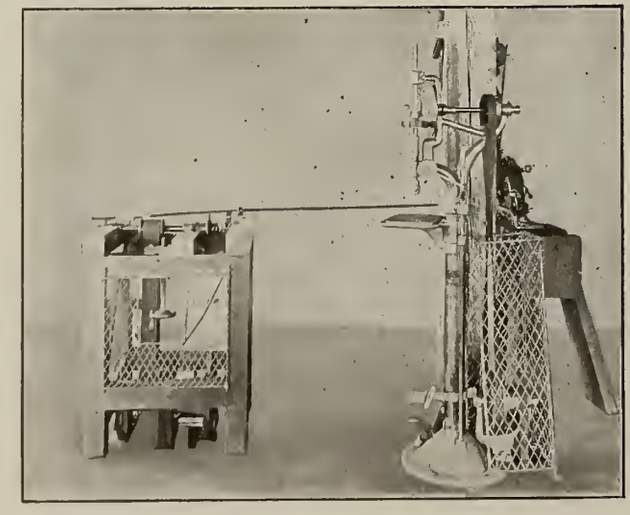
The difference between .50 and 1.50 per cent. on the pay-roll is AN ITEM OF INTEREST TO THE MANUFACTURER.

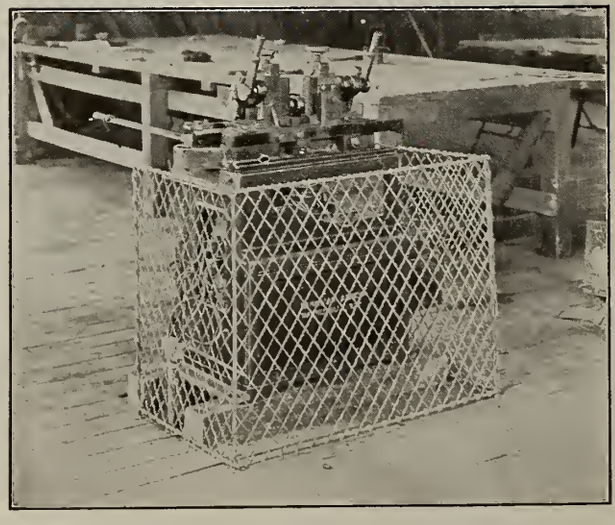
Prevention of Accidents is the Surest Method of Reducing Rates

NO ACCIDENTS—NO PAY!









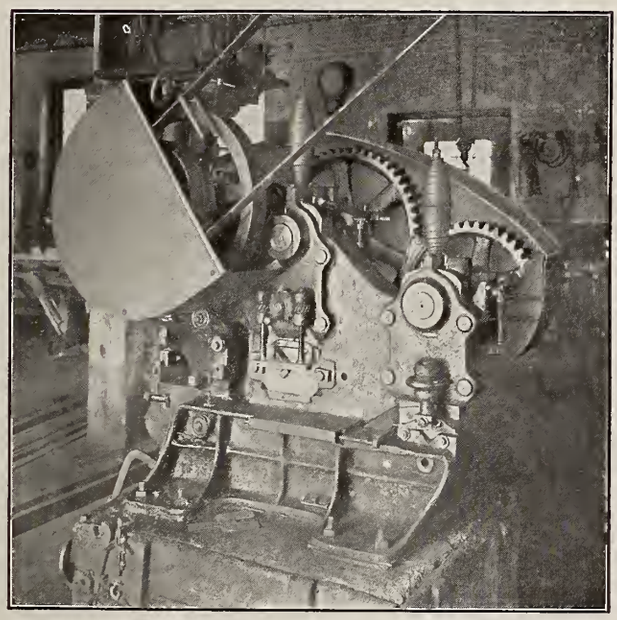
The cuts on this and the opposite page illustrate how one factory provides protection.

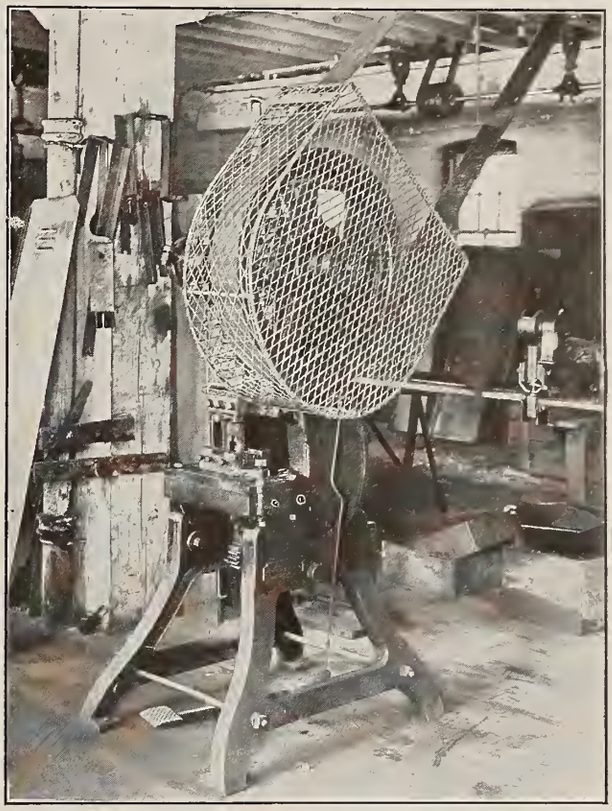
NOTE THE GUARDS!

THE GEO. B. MEADOWS

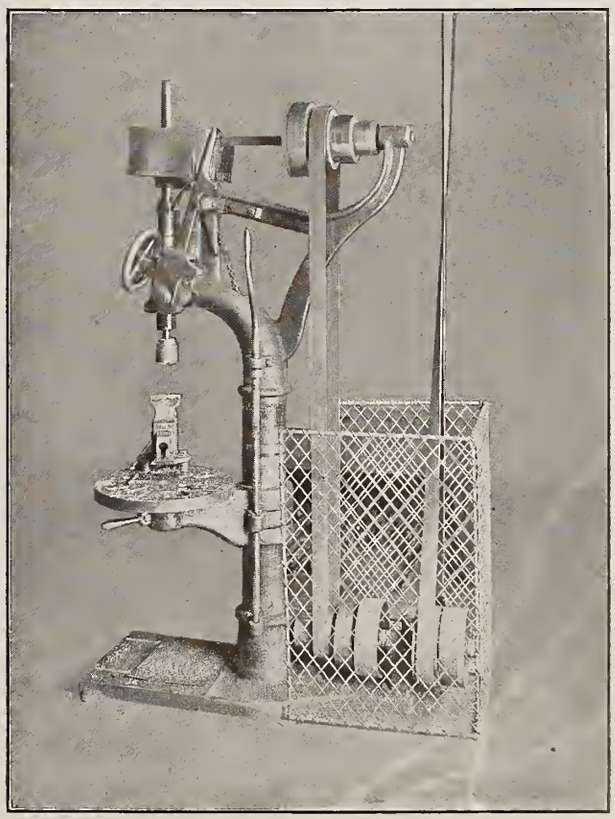
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Know how to make
Safety Devices









Other illustrations will appear in next month's issue.

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1875 1915

THE

BOILER INSPECTION & INSURANCE COMPANY

OF CANADA

Head Office : THE CONTINENTAL LIFE BUILDING, TORONTO

President and Chief Engineer,
GEORGE C. ROBB

Vice-President and General Manager,
H. N. ROBERTS

FINANCIAL STATEMENT, JANUARY 1, 1915

Assets		Liabilities	
Cash on Hand and in Banks	$15,727.28	Unearned Premium Reserve	$87,828.55
Mortgage Loan	5,000.00	Other Liabilities	325.50
Stocks. Bonds and Debentures	240,258.08	Total Liabilities except capital	$88,154.05
Other Assets	14,279.67	Capital Paid Up $100,100.00	
		Surplus over all Liabilities 87,010.98	
		Total Surplus for Policyholders	187,110.98
	$275,265.03		$275,265.03

LIST OF SECURITIES OWNED BY THE COMPANY

Market Value December 31, 1914.

Debentures		Debentures	
City of Vancouver, 3½%, 1942	$5,390.00	Amount brought forward	$114,719.13
City of Vancouver, 4%, 1946	5,880.00	City of Moose Jaw, 4½%, 1921	9,500.00
Town of Owen Sound, 4%, 1923	3,640.00	City of Medicine Hat, 5%, 1932-35	11,280.00
City of London, 4%, 1921	5,640.00	City of Toronto, 4½%, 1963	13,893.75
Town of Maisonneuve, 4½%, 1946	9,100.00	Province of Alberta, 4½%, 1924	28,875.00
Town of Westmount, 4½%, 1947	8,460.00		
City of Hamilton, Hospital Ex., 4%, 1915-19	8,448.94	**Bonds and Stocks**	
City of Kamloops, 5%, 1956	4,300.00	Canada Southern Railway, 5%, 1962	19,760.00
City of Edmonton, School Dist. No. 7, 5%, 1915-38	11,520.19	Consumers Gas Company	16,800.00
City of Saskatoon, School Dist. No. 13, 5%, 1921	18,400.00	Canada Permanent Mortgage Corporation	11,555.20
District of Burnaby, 5%, 1922	23,500.00	Toronto General Trusts Corporation	13,875.00
City of Strathcona, 4½%, 1949	10,440.00		$240,258.08
Amount carried forward	$114,719.13		

The Policies of the Boiler Inspection and Insurance Company of Canada are guaranteed by the Hartford Steam Boiler Inspection and Insurance Company under a license granted by the Dominion Government for that purpose.

The Hartford Steam Boiler Inspection and Insurance Company

Head Office : HARTFORD, CONN.

President, LYMAN B. BRAINERD *Vice-President, F. B. ALLEN* *Secretary, CHAS. S. BLAKE*

Chief Agent in Canada, H. N. ROBERTS

Head Office in Canada : CONTINENTAL LIFE BUILDING, TORONTO

FINANCIAL STATEMENT, JANUARY 1, 1915

Assets		Liabilities	
Cash on Hand and in Banks	$174,863.58	Reserve for Unearned Premiums	$2,331,531.90
Mortgage Loans	1,266,145.00	Other Liabilities	148,313.83
Real Estate	90,200.00	Total Liabilities except Capital	$2,479,845.73
Bonds and Stocks, market value	3,741,954.00	Capital paid up $1,000,000.00	
Other Assets	386,410.92	Surplus over all Liabilities 2,179,727.77	
		Total Surplus for Policyholders	3,179,727.77
	$5,659,573.50		$5,659,573.50

Total Surplus Assets for Security of Policyholders of Boiler Inspection and Insurance Co., $3,366,838.75

Safety Waterproof Fibre

MADE IN CANADA *and* WELL MADE

NOTHING BETTER for CASE LINING
PERISHABLE GOODS
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Waterproof, Tough and Stands the Wear and Tear of Traffic.
No Danger from Snow, Rain or Wet Platforms.

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ROLLS of Any Width
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St. Lawrence Bond Burmese Bond

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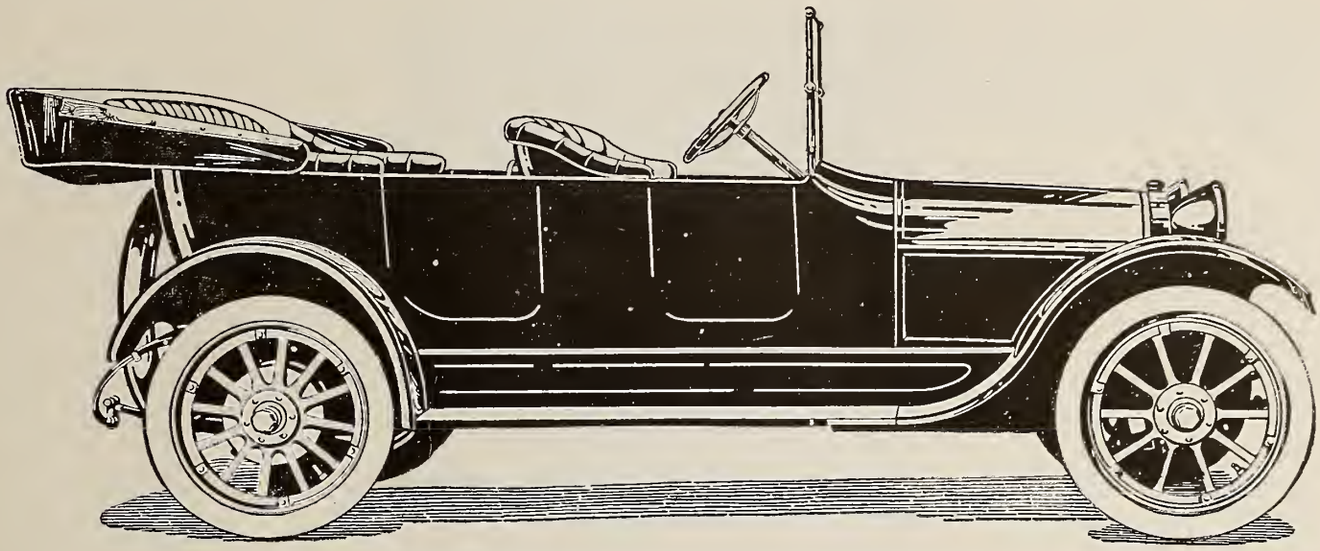
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The Russell Six-30 tells its own story in miles of incomparable smoothness, luxury and easy riding—in new motoring pleasure and satisfaction—in materials and workmanship—in design and construction.

It is up-to-date in every respect. The light, long-stroke, high efficiency Continental Motor is endorsed by the best known engineers. The clutch and transmission are a unit with the engine.

In actual tests, covering thousands of miles, our engineers have demonstrated the unusual economy of the car—the result of correct design, highest quality materials and most careful workmanship.

There are many features which make the Russell Six-30 a very desirable car. Among them are full-floating rear axle, heat treated chrome nickel steel gears and Bijur two-unit proven electric starting and lighting system. All these are features of high-priced cars.

You get gasoline and power saving; big oil-and-dust-proof double brakes; vacuum fuel feed; long wheel base; ample wheels and large tires; deep upholstering and perfect balance throughout.

Investigate this car. Not because it is made in Canada, but because it gives you the biggest dollar-for-dollar value you can get anywhere in the world.

OTHER MODELS

Russell Four-32
$2650

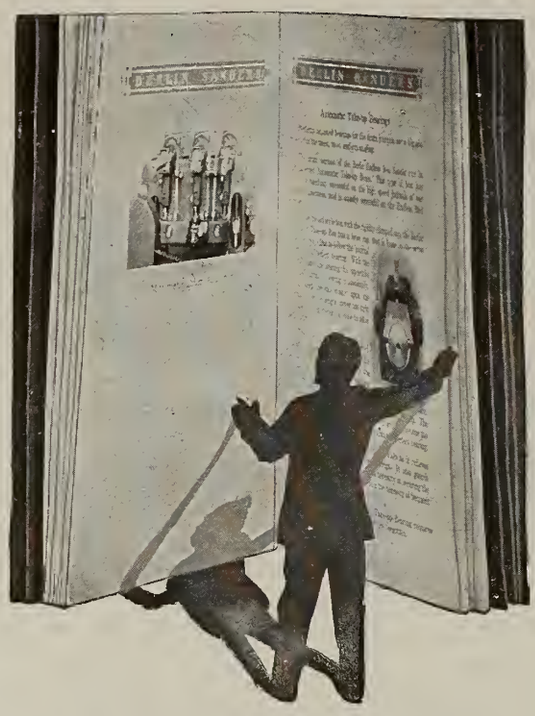
Russell Six-48
$4500

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West Toronto

Factory Branches: Toronto, Montreal, Hamilton
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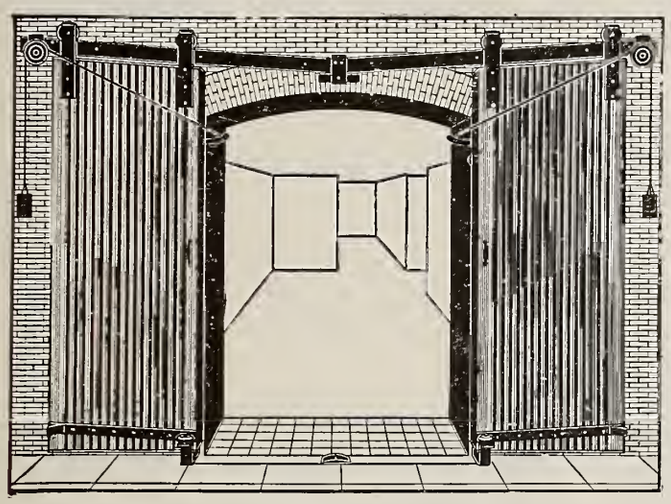
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SHEET METAL FIRE DOOR



DOUBLE GRAVITY SLIDING DOOR TYPE

THIS door is radically different from any Fire Door heretofore known. Made of steel and asbestos, crosslaid galvanized iron of two thickness, with air spaces and asbestos lining 1/16 inch thick prevents warping. Much lighter than any other standard Fire Door. Weight only 5 lbs. per square foot. Can be installed in any manner that other Fire Doors are installed—sliding, swinging, vertical, etc.—latest approved hardware and trimmings used. Rated "A-1" by Underwriters Laboratories.

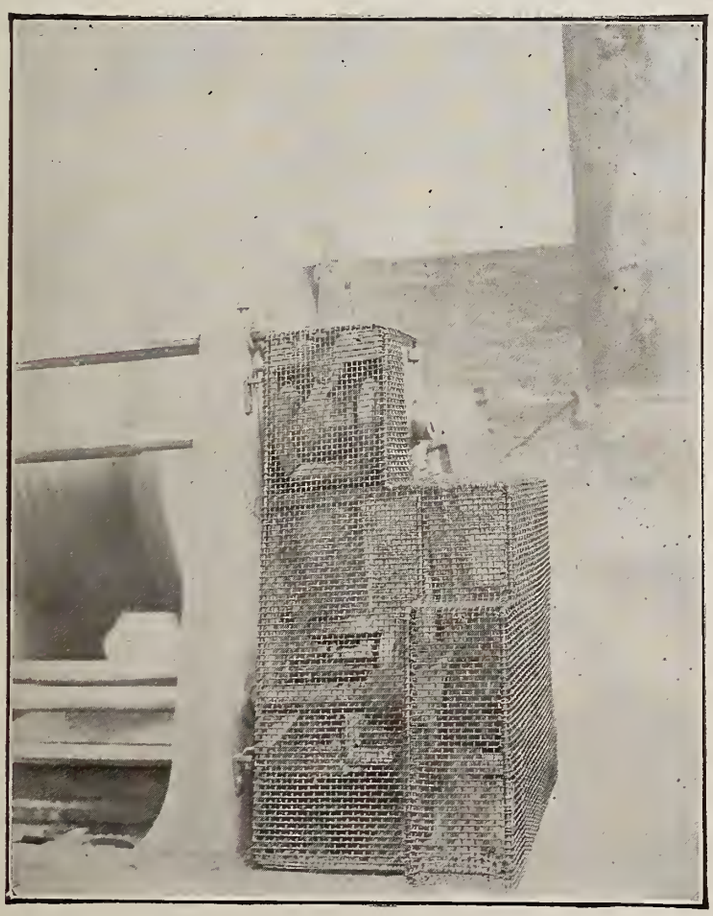
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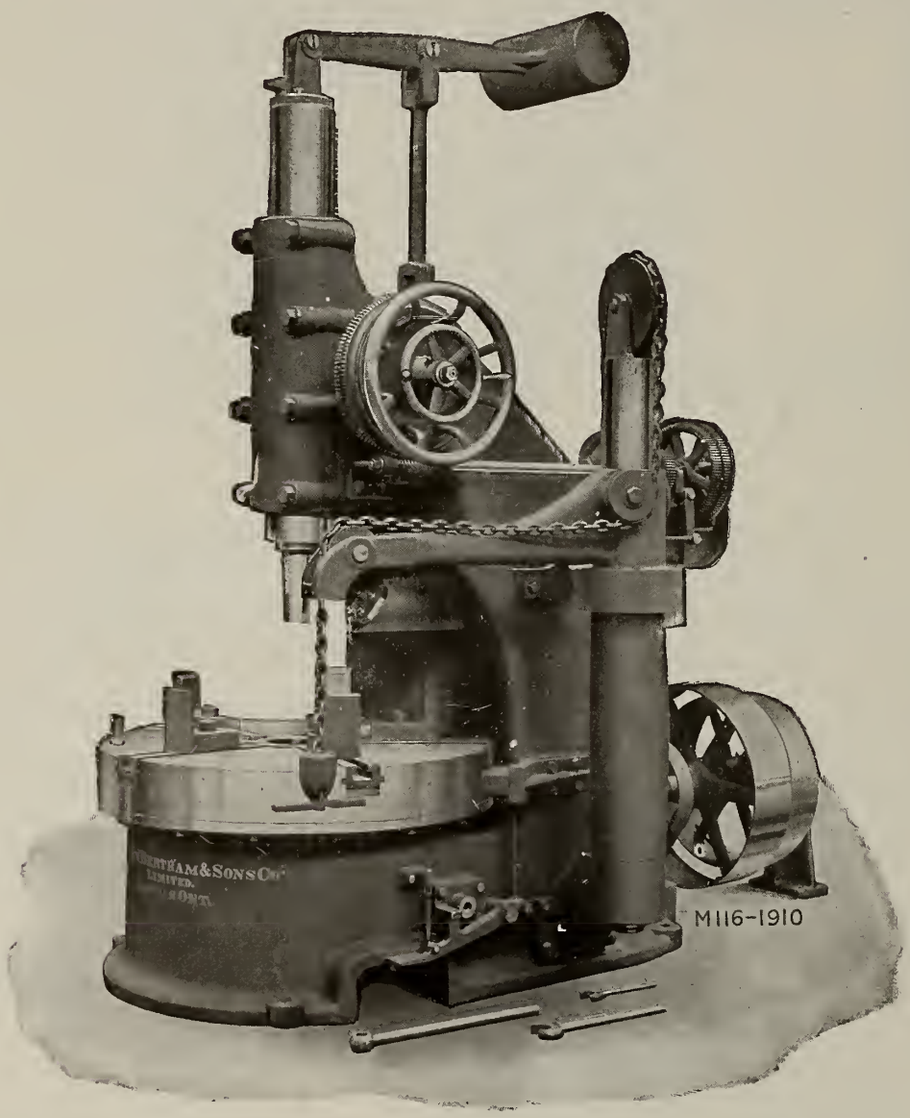
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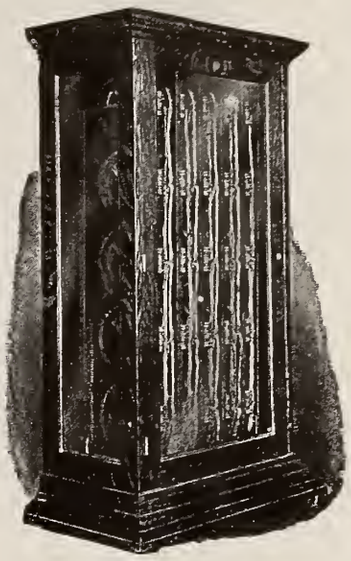
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YOU save money in your own time; you save money in the time of your employees; and you save money in the better service you give your customers.

Your own time? Yes. If you can keep in touch from your office with every man in your factory, every Departmental Head, every piece of work, you save the time that it would take to visit every corner of your building.

How many minutes a day are wasted in this way or in having a foreman come to you to report on his work? While he is doing that he is unproductive. And his workmen have not his supervision. An important matter, is it not?

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A house Telephone system preserves your organization. Every man is in his place. Every man is doing the work allotted to him.

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22 Other Canadian Manufacturers supplied us with material for this machine

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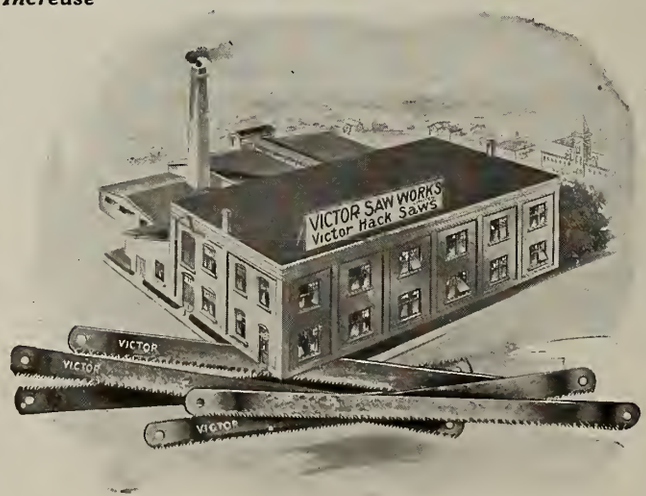
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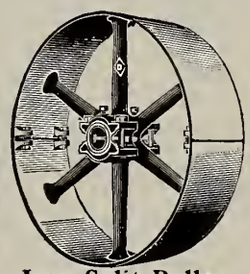
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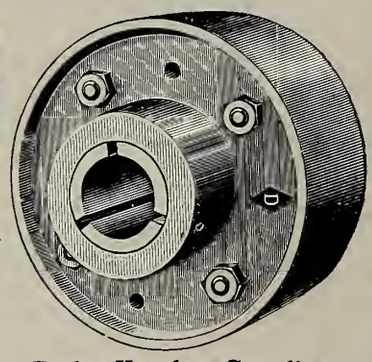
Dodge Steel Split Pulley



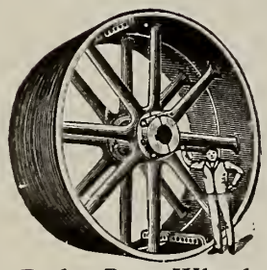
Iron Split Pulley



Dodge Wood Split Pulley



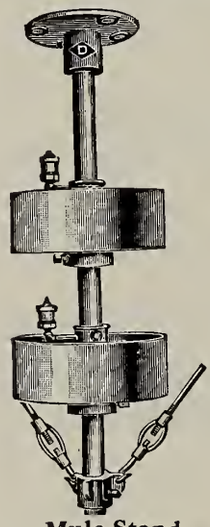
Dodge Key-less Coupling



Dodge Rope Wheel



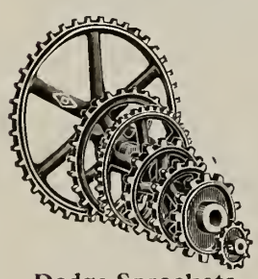
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Mule Stand



Dodge Safety Collars



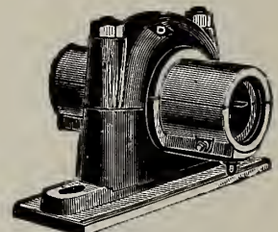
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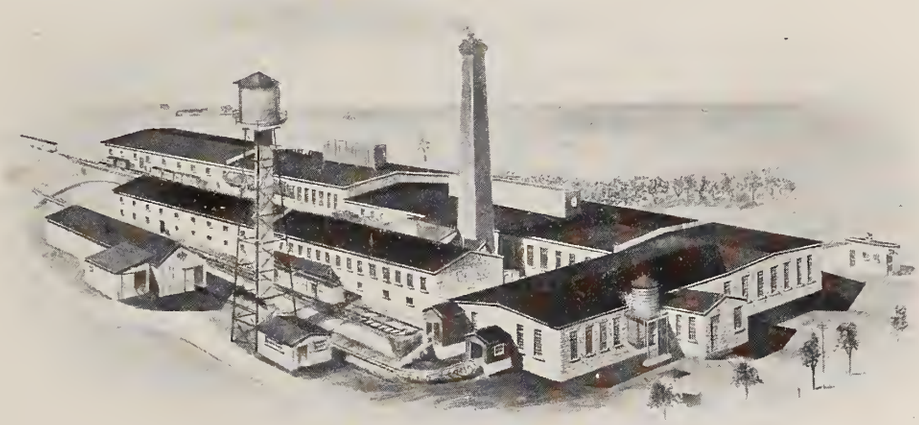
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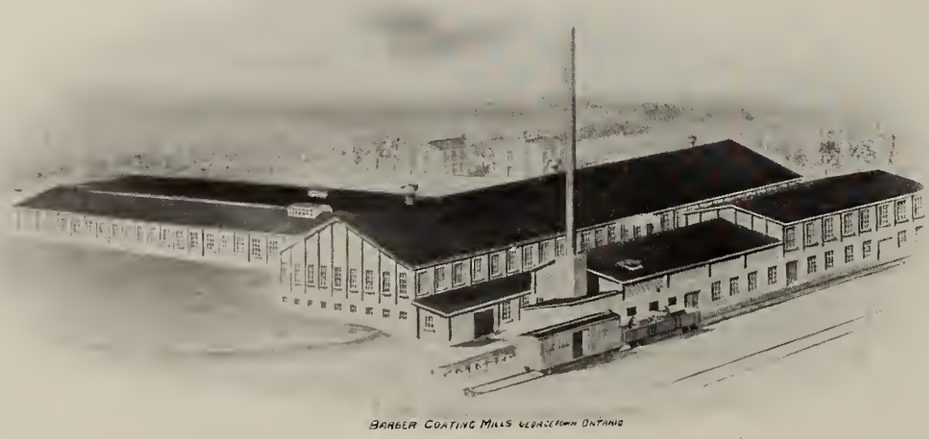
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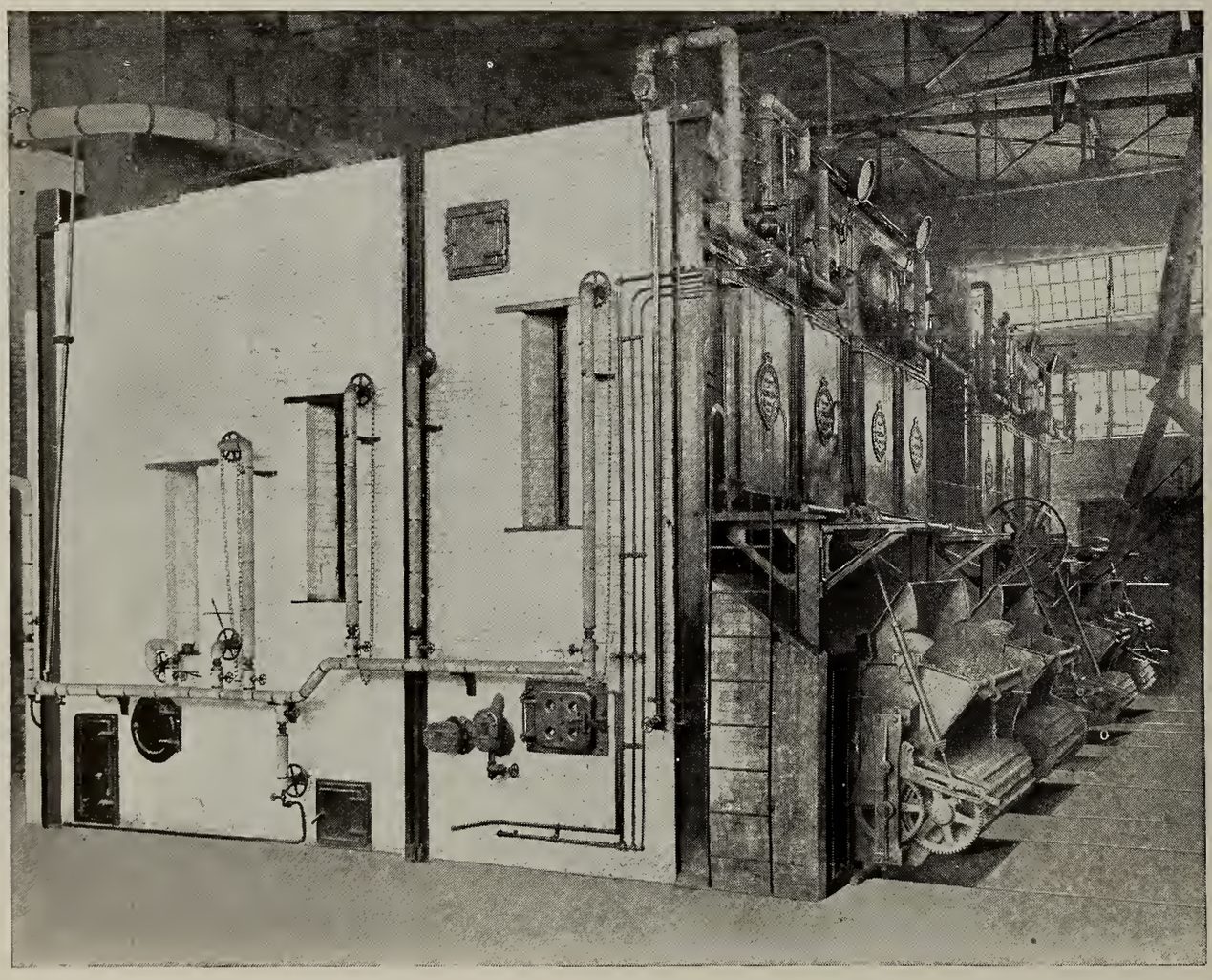


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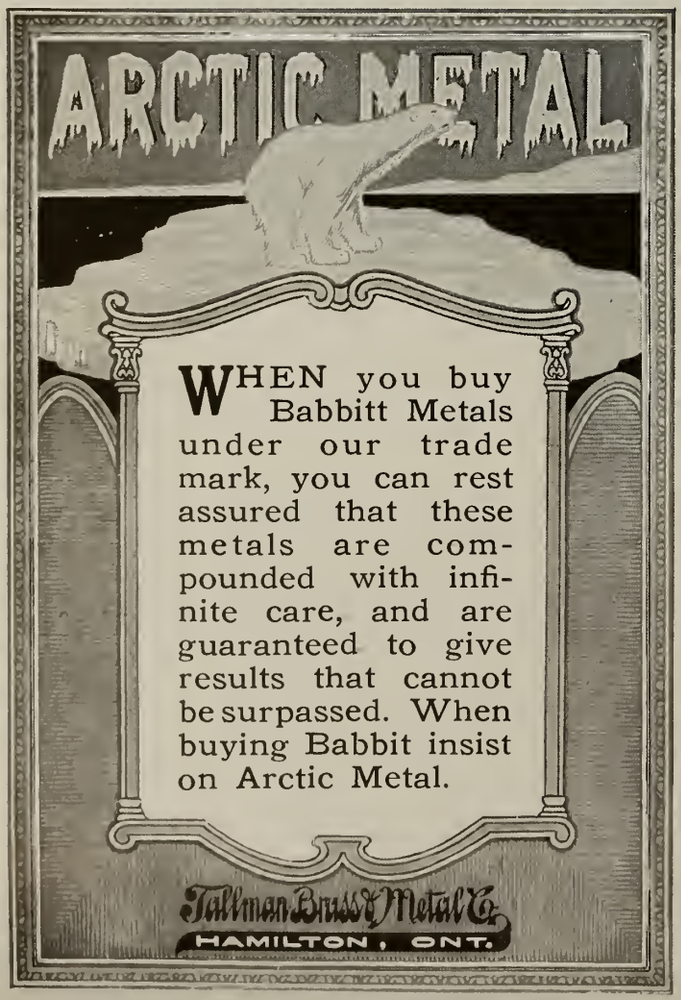
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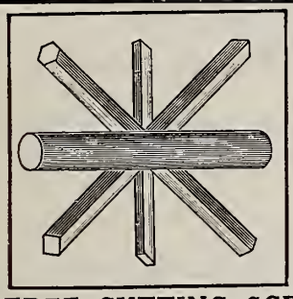
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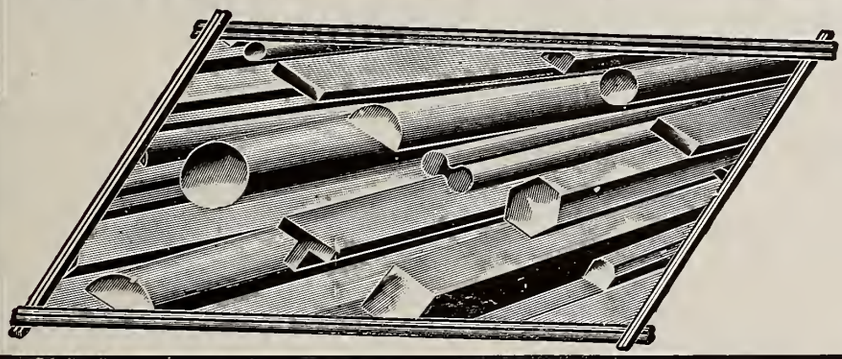
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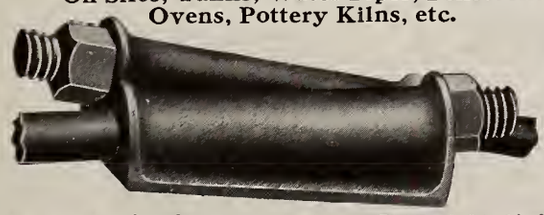
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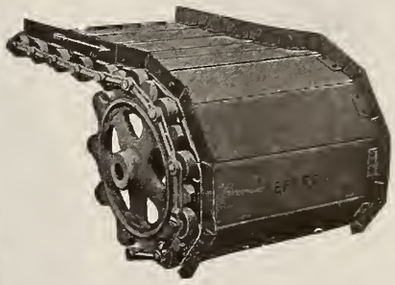
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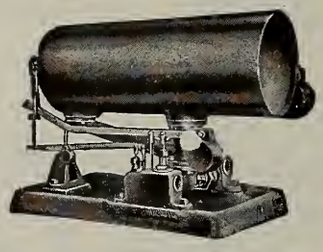
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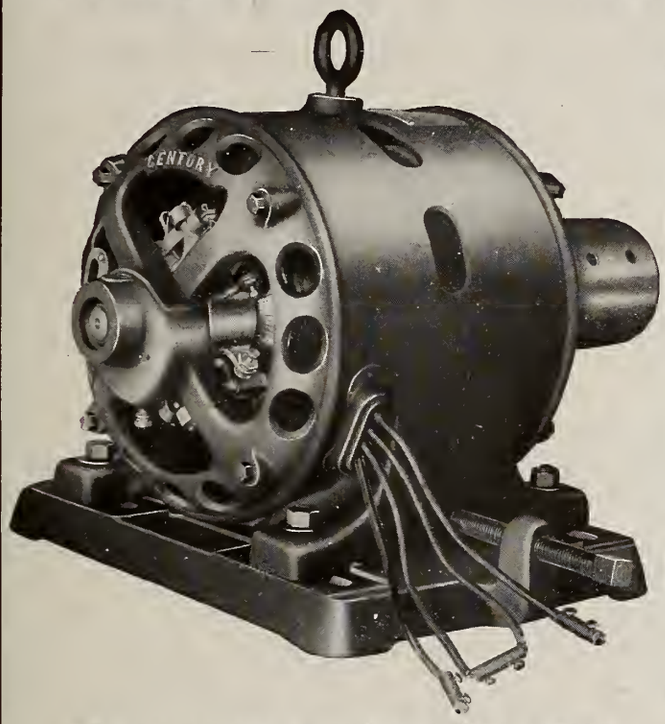
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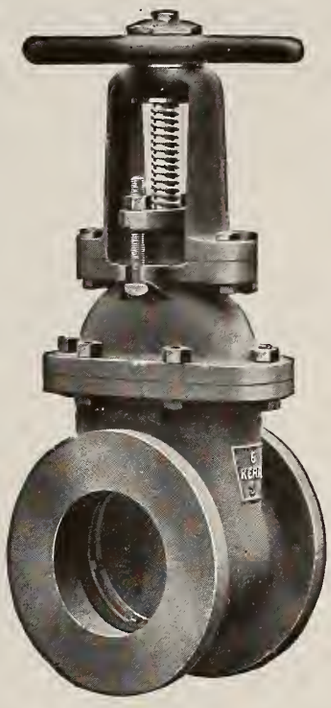
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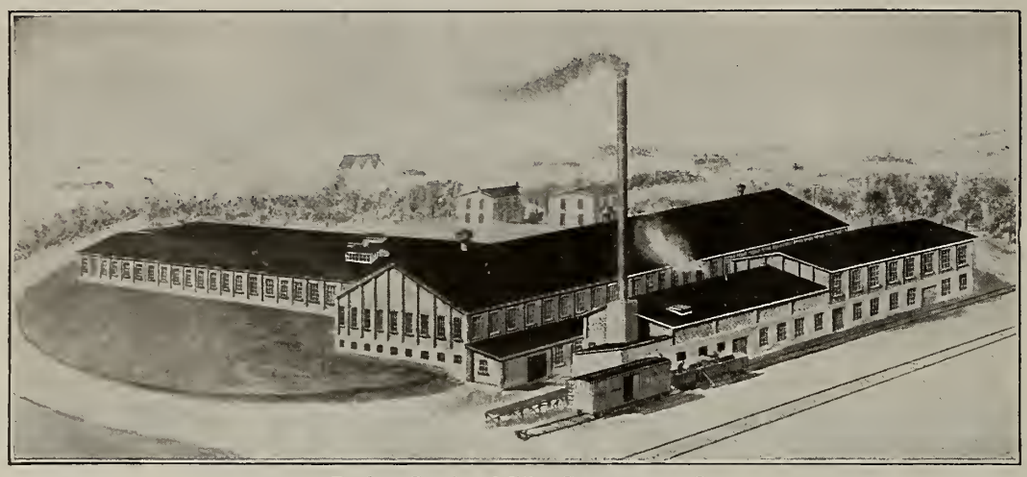
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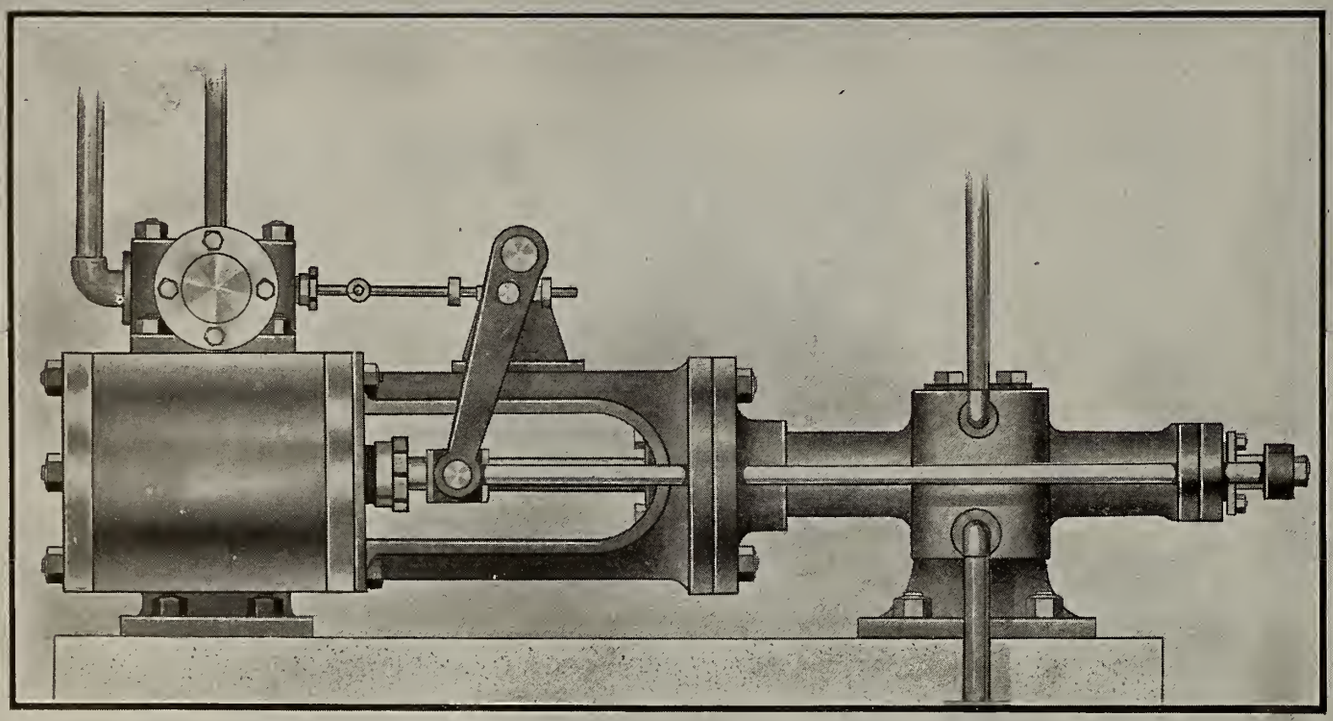
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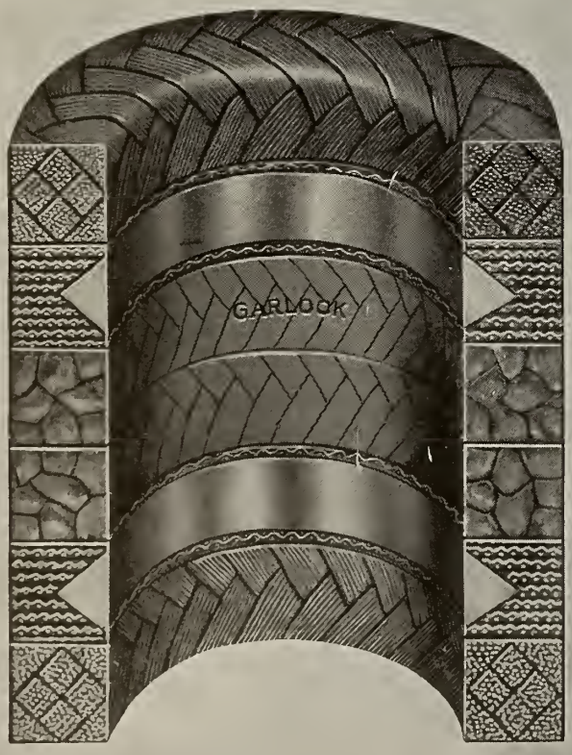
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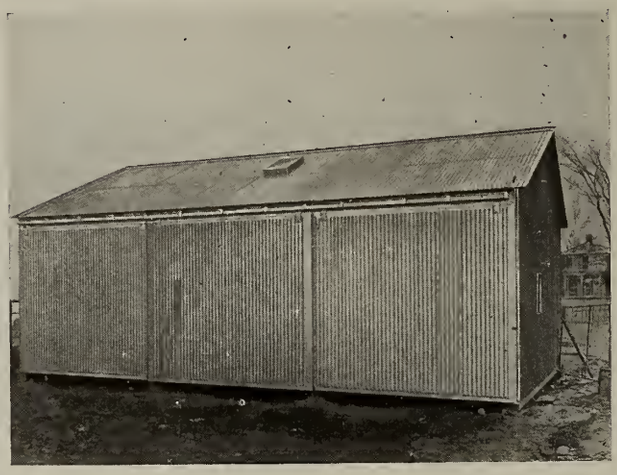
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SHOPS:
BRIDGEBURG, ONTARIO
Greenville, Pa. (Pittsburg District)
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NOTICE

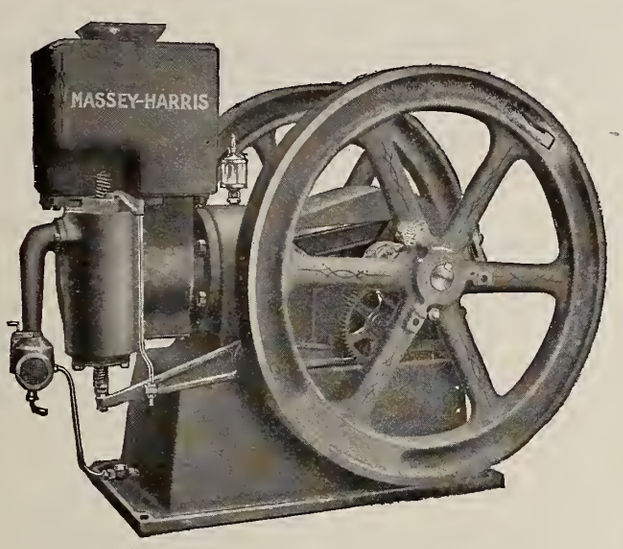
To Manufacturers, Dealers and Users of Steam Boilers.

All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.

HON. FINLEY G. MACDIARMID, Minister of Public Works. D. M. MEDCALF, Chief Inspector of Steam Boilers.



RELIABILITY EFFICIENCY ECONOMY

THESE qualities are all embodied in the construction of Massey-Harris Gasoline Engines. Every piece that goes to make up one of these Engines undergoes rigid inspection before it becomes a part of the engine. Every engine is thoroughly tested before leaving the factory. We do nothing by halves and do not believe in slipshod methods, and consequently satisfaction is guaranteed with every engine we sell.

Contractors and builders will find it to their advantage to investigate the merits of our engines. They are built in a number of sizes from 1½ to 20 horse-power and are also made in combinations most handy for construction work, as Contractors' Hoists, Direct-Connected Pumps, Wood-Sawing Outfits, and Diaphragm Suction Pumps.

Catalogue and prices furnished on request

MASSEY-HARRIS CO., Limited

HEAD OFFICES, TORONTO, CANADA
Branches at Montreal, Moncton, Winnipeg, Regina
Saskatoon, Yorkton, Swift Current, Calgary, Edmonton

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If you knew you would have to spend $180.00 every few years to repair your roof to preserve it and make the guarantee good, would you use that roofing? Painting *is repairing*, and it will cost $180 at the very lowest price to paint every 100 squares of roofing twice.

JM

Asbestos Roofing

is a little higher-priced at the beginning than ordinary roofings—but its *first* cost is the *last cost.* It never needs paint, gravel or other protection. So it saves money in the long run.

Made of Asbestos (rock) and Trinidad Lake Asphalt — both minerals. Literally a flexible *stone* roofing. Gives excellent fire protection. Not affected by heat, cold, salt air or acid fumes.

J-M Roofing Cleats, packed in each roll, make joints absolutely water-tight and do away with unsightly black cement.

In ready-to-lay and built-up form. Suitable for all types of buildings.

Users of rubber type roofings can get J-M quality in J-M Regal Roofing.

Write our nearest branch for specimen of Asbestos Rock and "J-M Asbestos Roofing Catalog 303."

The Canadian H. W. Johns-Manville Co., Ltd.

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LIMITED
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ALUMINUM

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There is but one absolutely safe method of wiring. Instal a CONDUIT SYSTEM, it will eliminate all risk of Fire.

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"Conduits"
HAVE NO EQUALS

Conduits Company Limited
TORONTO *MONTREAL*

STEAM PLATE PRESSES

HYDRAULIC OR KNUCKLE JOINT

We are prepared to quote prices on almost any size, any number of plates, for any pressure required. Write for descriptive Circular.

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COMPANY, LIMITED
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"Metallic" Building Materials

USE BRITISH GOODS— SUPPORT THE EMPIRE

Every foreigner who sells you goods that you could buy in the Empire is taking just that much money away to build up foreign industries and keep foreign workmen employed.

Keep the money at home where it will circulate back to you Especially when you can get equal or better values at home. The "Metallic" line of building materials is British-made through and through.

The "Metallic" line includes: "Empire" Corrugated Iron; "Eastlake" Steel Shingles; Steel Siding, Ceiling and Wall Plates; "Hayes" Patent Lath; Skylights; Ventilators; Galvanized or Copper Cornices; Fire-proof Doors and Windows; Well Curbing; Culverts; Conductor Pipe and Eave-troughs.

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Manufacturers TORONTO and WINNIPEG



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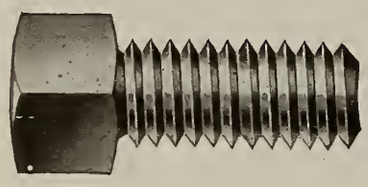
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Hillsborough, New Brunswick, Canada

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MORROW Drills

MORROW Products are unconditionally guaranteed.

MORROW Products are best by actual tests.

Argument adverse to "MORROW" products is wasted argument.

The Jobber and user who know MORROW Products cannot be persuaded to buy goods of lower standards.



John Morrow Screw & Nut Co., Limited

INGERSOLL - - - ONTARIO



MADE IN CANADA

Canadian Hart Wheels

CUT FASTER LAST LONGER

Than any other wheels on the market

Tell us the service you want performed and we will supply you with an abraser that will save you time, money and worry.

Send for one of our catalogues and tell us your troubles. We do the rest. :: :: :: ::

CANADIAN HART WHEELS LIMITED

450 BARTON ST. EAST

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ESTABLISHED 1850.

DID YOU EVER NOTICE

that jarring, grinding noise in your machine shop caused by the metal gears?

Wouldn't you like to stop that noise? You can do it by using

NEW PROCESS GEARS RAWHIDE PINIONS

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Ask us about it.

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Automatic Fire Sprinkler System

throughout your Factory, Store or Warehouse.

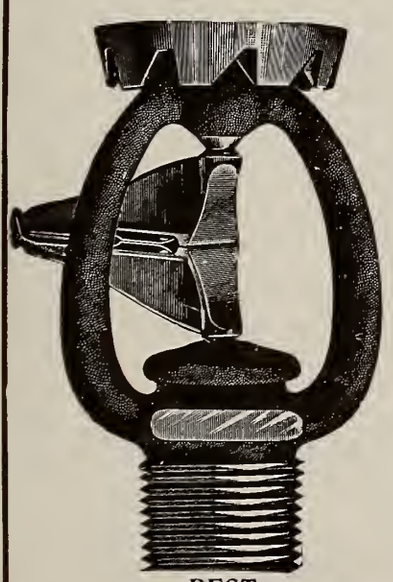


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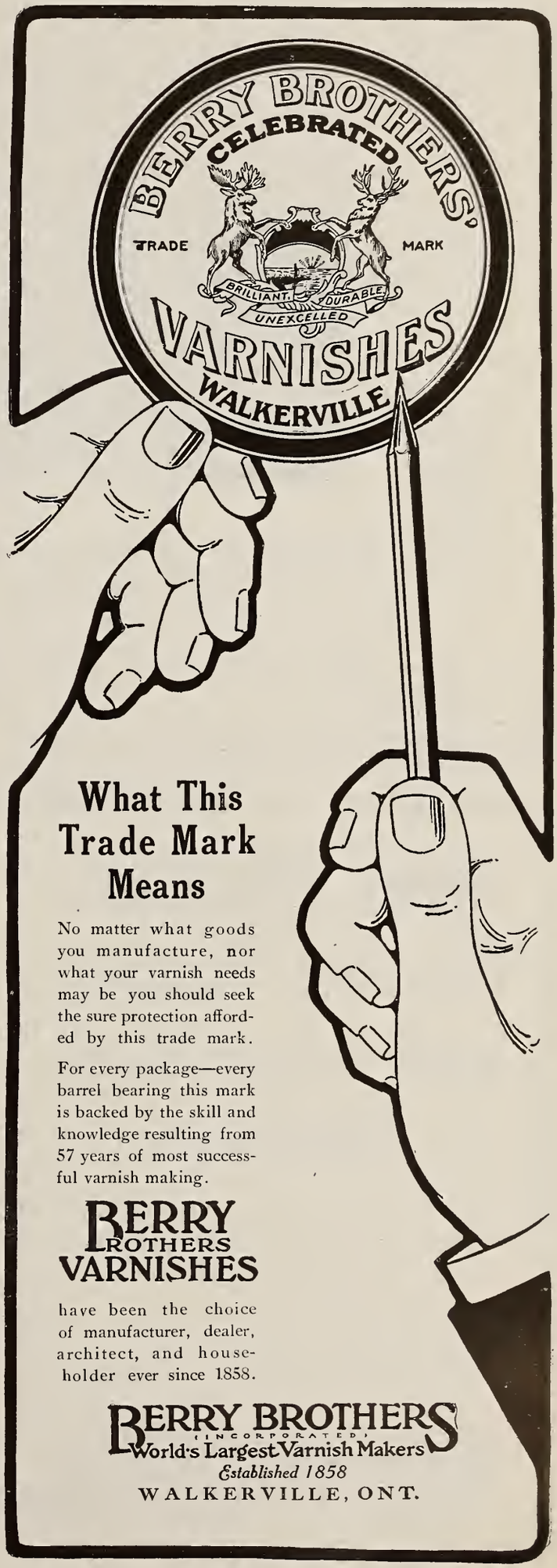
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Limited

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Esty : : Automatic Fire : : Sprinkler :

It will cut your insurance premium in half and protect you against loss by fire. Write for particulars



What This Trade Mark Means

No matter what goods you manufacture, nor what your varnish needs may be you should seek the sure protection afforded by this trade mark.

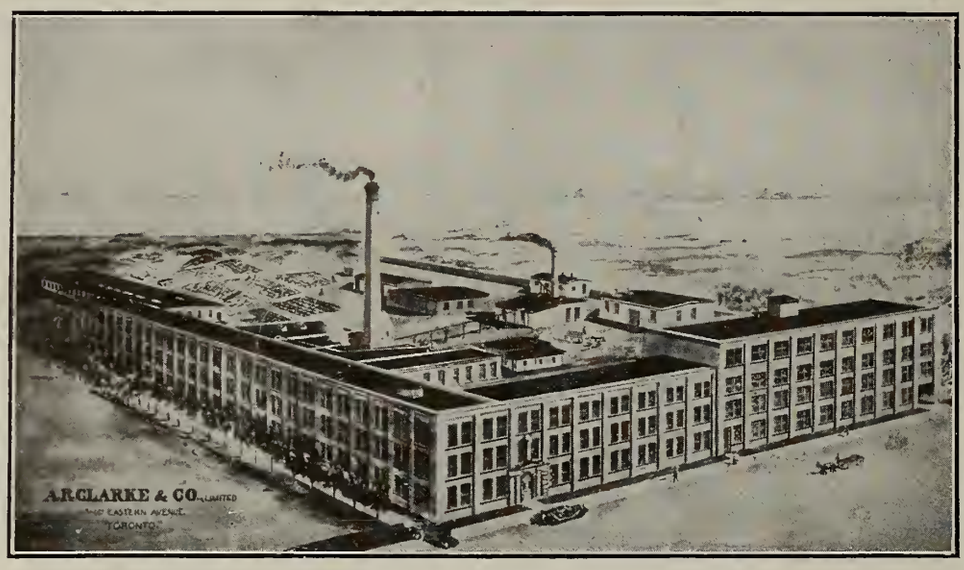
For every package—every barrel bearing this mark is backed by the skill and knowledge resulting from 57 years of most successful varnish making.

BERRY BROTHERS VARNISHES

have been the choice of manufacturer, dealer, architect, and householder ever since 1858.

BERRY BROTHERS
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World's Largest Varnish Makers
Established 1858
WALKERVILLE, ONT.

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ESTABLISHED
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The Largest Patent Leather Manufacturers in the British Empire

A. R. CLARKE & CO., LIMITED

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We have the largest Jobbing Brass Foundry in Canada

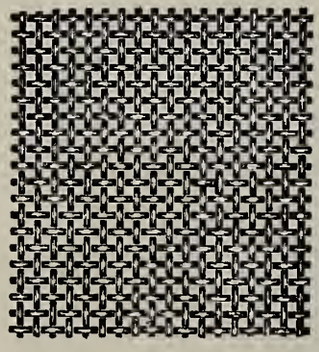
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Tallman's Reputation is in the Goods

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Canada Wire & Iron Goods Co.

HAMILTON - - CANADA



Manufacturers of **Double Crimped Wire Cloth and Wire Screening** for all purposes of Iron, Brass, Copper, Bronze, Galvanized and Tinned Wire, etc.

There is no kind of Wire Fabric required in the production of any machine or manufactured article that we cannot furnish.

We also manufacture:—

Bank and Office Grilles and Ornamental Iron Work in all finishes.

Wire Guards for Factory Windows, Moulders' Riddles, Laboratory Testing Sieves, Steel Factory Stools and Metal Lockers.

Send for Catalogue — Enquiries Solicited

ARE YOUR STEAM PIPES INSULATED?

IF NOT YOU ARE BURNING MONEY

A **GOOD** Covering pays for itself in one Season, and is a revenue producer indefinitely.
The Best is the Cheapest. ☞**WE HAVE IT.**

EUREKA MINERAL WOOL & ASBESTOS COMPANY

118 ADELAIDE STREET WEST, TORONTO, ONTARIO

NOTICE

to

Stationary Engineers

Everyone operating a Stationary steam plant of 50 h.p. or over in the Province of Ontario must hold a Certificate from the Stationary Engineers' Board. Anyone operating such a plant without a Certificate is liable to the penalties set forth in the Stationary Engineers' Act.

HON. JAS. S. DUFF
Minister of Agriculture

W. C. McGHIE
Chairman of the Board

NOTICE

The following are the Factory Inspectors for the Province of Ontario:

JAS. T. BURKE, Chief Inspector, Parliament Buildings, Toronto.
H. A. CLARK, 432 Woodman Avenue, London.
A. W. HOLMES, Parliament Buildings, Toronto.
ROBERT HUNGERFORD, Parliament Buildings, Toronto.
MISS MARGARET CARLYLE, Parliament Buildings, Toronto.
MRS. A. BROWN, Parliament Buildings, Toronto.
THOMAS KEILTX, 25 Rnssell Avenue, Ottawa.
S. J. MALLION, 214 Wellington Street, Stratford.
FRED KELLOND, 157 Wellington Street South, Hamilton.
H. J. TUTT, 13 Enderby Road East, Toronto.

Persons having business with any of the Inspectors will find them at the above address. **HON. JAS. S. DUFF**, Minister of Agriculture. Phone Main 5800.

Put Your Filing on a Scientific Basis

The cost of Files is relatively small. The cost of Filing-Time is large. Hand-labor is always expensive.

By a slight increase in the cost of Files, you can effect a substantial decrease in the cost of Filing-Time.

When a file requires more time and effort to perform a given piece of work, it has reached the "inefficient" point. From that time on, its further use means impairment of QUANTITY or QUALITY of work—or even both. The total loss through its use will be many times the slight extra cost of SEVERAL new files.

Insist that your men PROMPTLY replace all worn files, when they have reached the "inefficient" point. This point varies with the workman and the character of the work. It can be easily ascertained in your shop.

In the interest of efficiency, promptly replace all worn files. For economy's sake, replace them with the "Famous Five."

50 years' experience makes them EFFICIENT. A 60,000,000 output yearly makes them ECONOMICAL. Our specially designed and developed machinery makes them ACCURATE. Our complete control of every manufacturing operation makes them UNIFORM. Over 4,000 different patterns make them AVAILABLE for every class of work. Rigid inspections and real service-tests make every file a PERFECT tool.

KEARNEY & FOOT
GREAT WESTERN
AMERICAN
ARCADE
GLOBE
(MADE-IN-CANADA)

We suggest a trial of the Famous Five in YOUR shops. We rest our case on their SERVICE.

Nicholson File Company, Port Hope, Ont.

Write for YOUR free copy of "File Filosophy"

BITUNAMEL

PREVENTS CORROSION

CERTAINLY, but think for a moment what this means. It means that the great objection to steel construction is removed; that the alarming and dangerous condition of some of the early built structures need not be repeated; and that architects and builders when they specify or use steel construction coated with Bitunamel have a material that experience has proved to be absolutely impervious to rust.

It is gas, acid and alkali proof, and is employed on many large ocean liners as a protection against the action of salt water.

The AULT & WIBORG CO. of Canada, Limited

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Montreal Winnipeg Cincinnati Philadelphia New York Buffalo Chicago Minneapolis San Francisco London Paris

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OF ALL KINDS

Canadian Billings & Spencer

Limited

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Offices—Toronto General Trusts Building *TORONTO*
59 Yonge Street *Canada*

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Can be supplied in rolls if preferred

For Concrete Road Pavement, Walks, Building Floors, Etc.

We are the *originators* of this wire reinforcement in flat sheets, and it is coming into universal use wherever introduced. We have supplied many carloads of it this past season.

The standard mesh for road pavement is 6 x 12 inches; for bridges and building floors, the standard is 3 x 6 inches. Also, other meshes as desired. All sheets 4 feet wide, and any length specified that can be loaded in cars.

Samples will be sent upon request

We also supply Iron Fences, Fire Escapes, Office Wire Work, and all kinds of Builders' Wire and Iron Work.

The Page Wire Fence Co., Limited

Dept. 20a

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Men forget business cares in the enjoyment of

Gourlay-Angelus
Player-Pianos



A GOURLAY-ANGELUS provides ANYONE with the ability to play ANY music artistically.

In the opportunity for recreation thus afforded, many busy men find enjoyment hitherto undreamed of, as well as a complete rest from the business worries and cares of the day. If you find it hard to leave these cares behind you when you go home, depend upon it, a Gourlay-Angelus will make you forget them.

One Toronto manufacturer tells of this pleasure in a Gourlay-Angelus as follows:—"I have always been glad I purchased the Gourlay-Angelus. The longer I have it the more I enjoy it and the more I use it."

Write for Catalogue and Prices

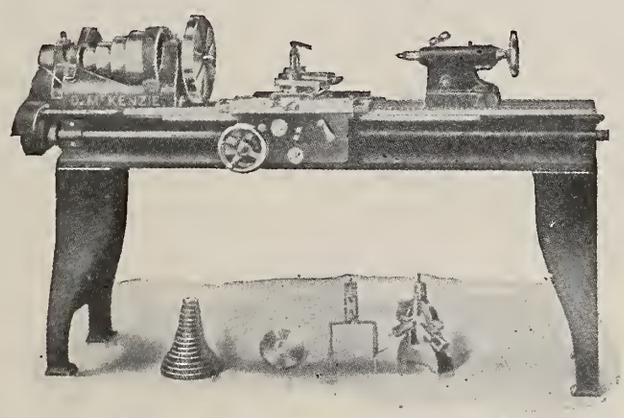
GOURLAY, WINTER & LEEMING,
188 Yonge St., Toronto

ENGINE LATHES

MADE FROM NEW PATTERNS AND OF AN IMPROVED DESIGN
CONSTRUCTED OF BEST MATERIAL BY EXPERT WORKMEN

Spindle of High Carbon Hammered Steel

Tail Stock—Cut-away Type



Compound Rest Graduated In Degrees

All Gear Feeds

14 inches × 6 feet Engine Lathe

D. McKenzie Machinery Co. - Guelph, Ont.

YOU CAN INCREASE YOUR POWER WITHOUT INCREASING THE SIZE OF YOUR POWER PLANT

Your present line shafting is consuming from 15% to 60% of your power.

The Chapman Double Ball Bearing will save this waste and turn it into productive energy.

They will also reduce your oiling and attention to a minimum.

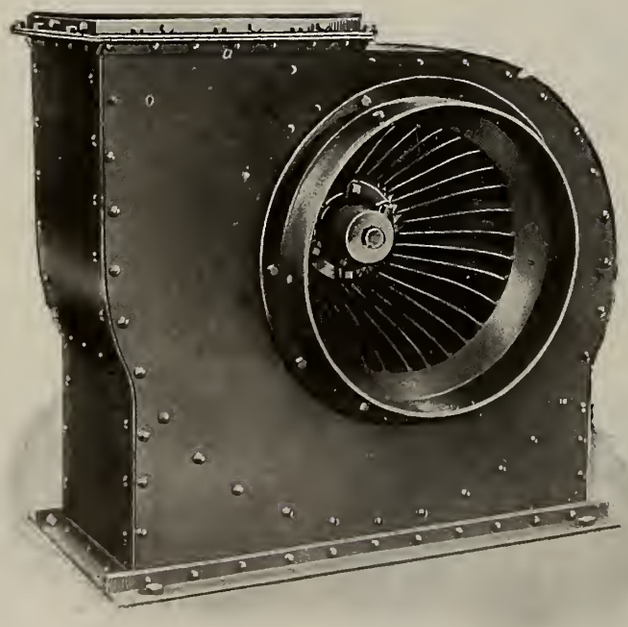
They fit any adjustable hanger and the change can be made with but little delay to you.



In use in over 2,000 Canadian Factories

The Chapman Double Ball Bearing Company
OF CANADA LIMITED

339-351 Sorauren Avenue ∴ ∴ Toronto, Canada



Keith Fans

For Heating and Ventilating

When it comes to a question of Heating and Ventilating the Factory, Church, School or Public Building, it is imperative that you should select the best and most approved system. The **"Keith" Fan** is specially distinguished for giving greater volume with less power than any other Fan made. Get our Keith Fan Catalogue No. 55 and judge for yourself.

SHELDONS LIMITED - GALT, ONTARIO

Toronto Office—911 KENT BUILDING

AGENTS

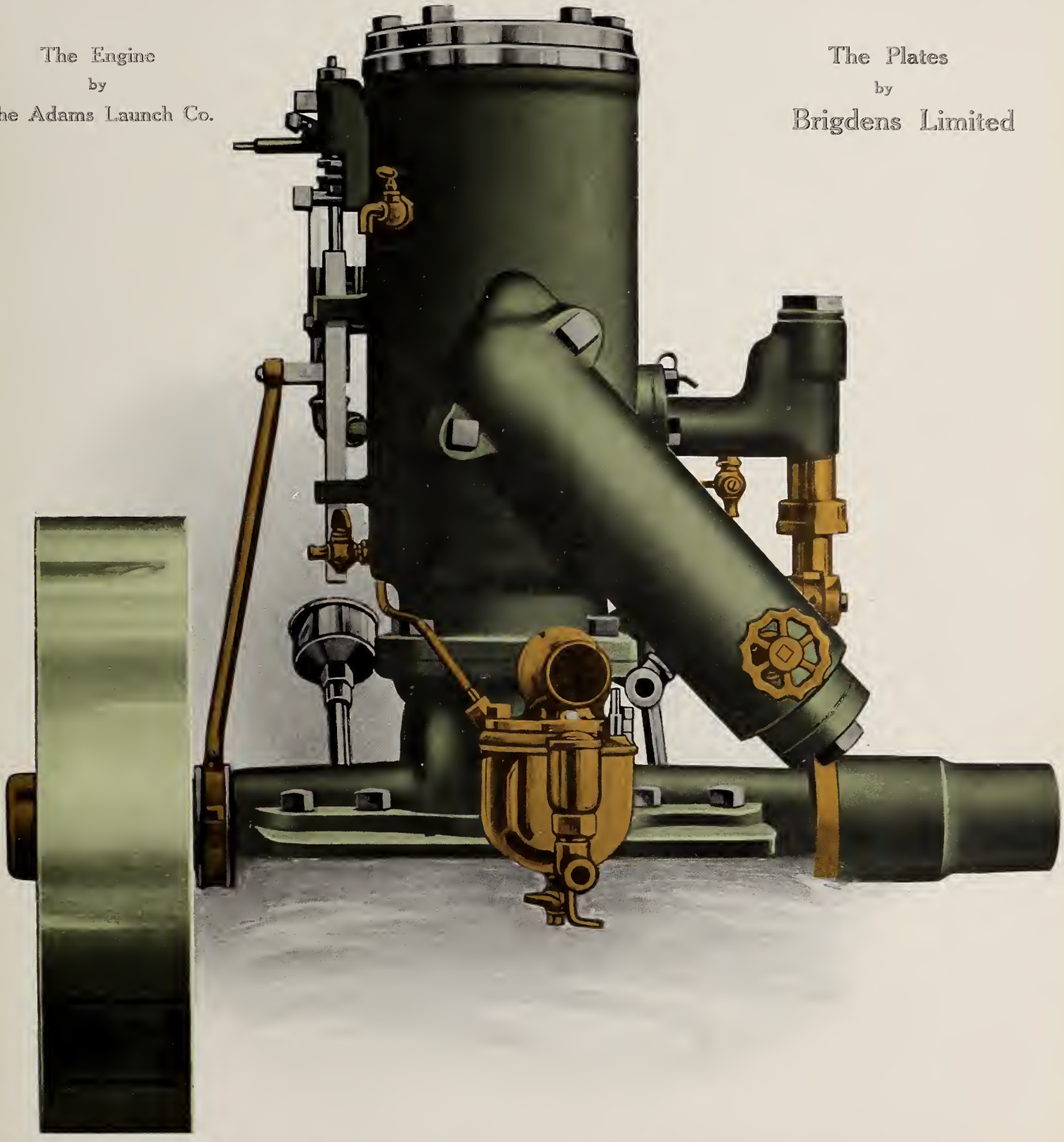
Messrs. ROSS & GREIG, 412 St. James Street, Montreal, Que.
Messrs. WALKER'S, LIMITED, 259-261 Stanley Street, Winnipeg, Man.
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An Instance Where Color Gives Reality

A Made-in-Canada Production

The Engine
by
The Adams Launch Co.

The Plates
by
Brigdens Limited



The Color gives an Extra Attention VALUE—a greater selling VALUE to this Illustration.

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WINNIPEG, Man.

The House of Quality and Four-fold Service

VALUE and PRICE

are not synonymous. The greatest VALUE in an Engraving is getting at a right price the best quality of the particular grade, style and finish that is exactly suited to the paper and press requirements. : : : :

Whatever the grade required—Line Newspaper Work—Four Color Process, and everything between—Our Quality is always the best.

When the Plates are made they can go direct to our Printing Department where the best possible result will be obtained by the natural and sympathetic collaboration of Artist, Engraver and Printer. : : : :

Our Consultation Department is prepared to co-operate with the experienced and advise the inexperienced buyer. : : :

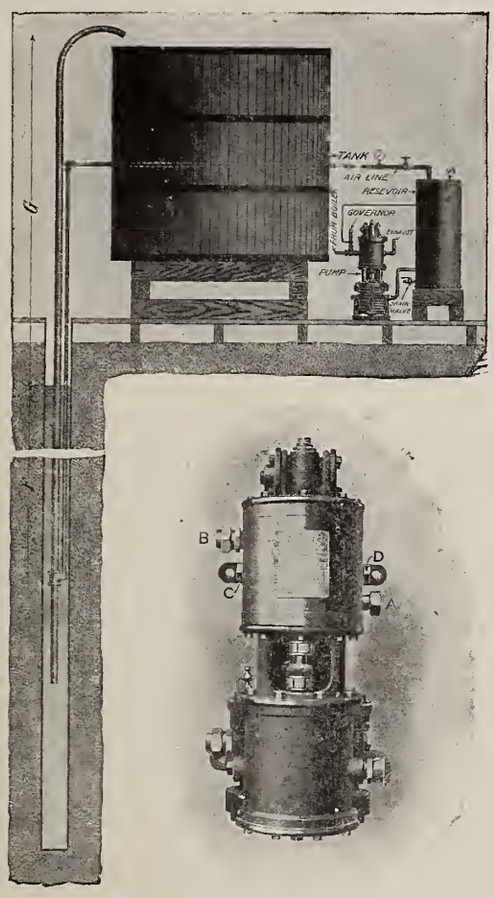
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Artists : Photographers : Engravers : Printers

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TORONTO - ONTARIO

And at WINNIPEG



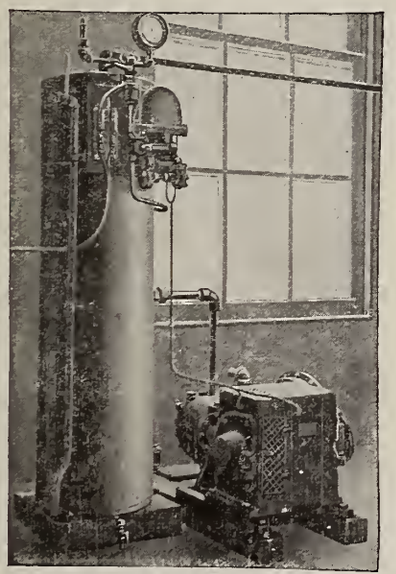
Westinghouse Steam-Driven Air Compressor Operating Direct Air Pressure Pumping Plant.

Hundreds of Industrial Plants are finding profitable use for—

Westinghouse
Steam-Driven and Motor-Driven
Air Compressors

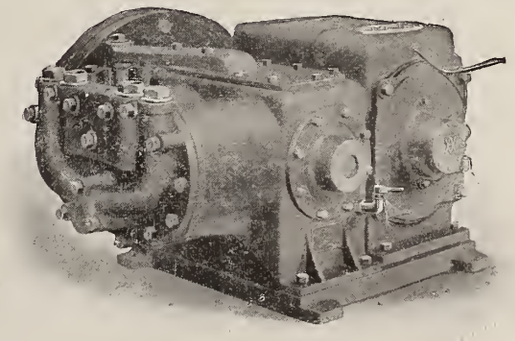
YOU can use them profitably in your work.

They occupy so little space, are so easy to operate, cost so little to maintain, and require so little attention, that new applications are being found for them constantly in all kinds of industries.



Westinghouse Motor-Driven Compressor Operating Steam Drying Tables in Newspaper Plant.

Without obligation on your part our nearest office will gladly assist you in solving your compressed air problem. Write them.



Westinghouse Motor-Driven Air Compressor.

Canadian Westinghouse Co., Limited, Hamilton, Ont.

TORONTO Traders Bank Bldg.	MONTREAL 52 Victoria Square	OTTAWA Ahearn & Soper, Ltd.	HALIFAX Telephone Bldg.	FORT WILLIAM Telfer Bldg.
WINNIPEG 138 Portage Ave. E.	CALGARY Grain Exchange Bldg.	EDMONTON Dominion Bldg.	VANCOUVER Bank of Ottawa Bldg.	

TO THE

CANADIAN MANUFACTURER

What does "Made-in-Canada" Mean to You?

If you were a stranger to your own Products, frankly now, how much would this slogan influence you to become a customer of your own goods: not merely **"willing to become,"** but an **actual revenue-producing customer?**

The slogan will doubtless influence you (as it will thousands of other Canadians) to **prefer** Canadian-made goods, but there its value ends, for it has no directions as to what **are** Canadian-made goods, or how and where to recognise them.

Isn't that just the weakness of the "Made-in-Canada" movement to-day—a great deal of **impulse** but no **action.** On the one hand a great public willing to prove their patriotism by supporting Canadian Manufacturers: on the other hand Canadian Manufacturers (with a great number of worthy exceptions) echoing the cry but taking no measures to turn that impulse into action by giving publicity to the facts concerning their products.

But the tide of interest in advertising among Canadian Manufacturers is rising, and more of them are, at least, **considering** how to direct the patriotic impulse in their direction.

It is at this "considering stage" that the J. Walter Thompson Company can help you so much.

We are in a position to advise you as to the proper steps that should be taken in order to prepare your business for advertising. Then, when you are ready, we are prepared to plan and conduct your Advertising Campaign.

On the other hand, if you are already advertising, it is altogether likely that we can bring out new selling features or remodel your present advertising plan to suit present-day conditions.

We shall be pleased to confer with manufacturers who are looking forward, either, to **commencing** advertising, or to **making their present advertising more efficient.**

J. Walter Thompson Co., Ltd.

Advertising Agents

Lumsden Building, Toronto

('Phones Main 329 & 330)

INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XV. | TORONTO, MARCH, 1915 | No. 8.

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

SUBSCRIPTION

Two Dollars per Year **Single Copies 20 cents**

Advertising Rates made known on application

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TORONTO

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The Budget.

IN framing the revenue producing measures announced in the Budget the Dominion Government was faced with a complex problem. Revenue had to be raised by some methods of taxation and, as there has never been unanimous agreement among the citizens of any country as to what methods are the most equitable and effective, the problem, while it was envolved by special circumstances, was by no means a new one. In Canada for the past forty years, the vast majority of the citizens, including the various administrations of both political parties, have used the tariff as a means of securing revenue and, at the same time, of affording protection to the products of our farms and factories. The two political parties have disagreed in regard to this policy only as to the degree to which it should be used. The number of people who believe in the abolition of the customs tariff is so small as to be practically negligible.

What are the taxation alternatives? The first is a direct tax on land; the second a tax on incomes. As provincial and municipal levies are made on both land and incomes, a proposal to adopt either or both is one requiring caution. Resort may yet be had to such expedients but the Government apparently believed that they should not be sought until the legitimate use of the customs tariff as a source of revenue was exhausted.

The Government had to get more money and, that hard fact being admitted, the only consideration left was how it should be accomplished with the least disturbance to the country. On the whole, the Government seems to have come through a difficult situation with credit. The new tariff gives the farmers more protection, while, by exempting an important list of articles used by farmers, it encourages them to meet the present demand for more food. It gives a slight increase in protection to some manufacturers but makes them pay for it to a considerable extent by taxing their raw material, thus getting revenue in two ways.

The special taxes are really levies on the well-to-do and are, therefore, in sympathy with the present trend of taxation in Great Britain and the United States.

How Manufacturers Are Affected.

HOW much do Canadian manufacturers benefit from the Government's revenue measures?

The seven and one-half per cent. horizontal increase in the customs tariff on manufactures gives some of them increased protection but the simultaneous increase of the duties on both free and dutiable raw material, takes part of this new protection away.

The benefit will have to be estimated individually. A manufacturer who takes a small quantity of cheap raw material and elaborates it into a highly specialized and expensive article will obviously benefit more than a manufacturer who changes the shape of raw material without considerably increasing its value, as, for example, manufacturers of certain iron and steel products. Collectively, however, manufacturers should be benefited by even so slight an increase of protection, which will diminish the flood of foreign goods sent into our country by hard times and will tend to stimulate the demand for articles manufactured in Canada.

But, it must be remembered that the tariff increase, while it will provide the greater part of the additional revenue, is not the only method of raising taxes imposed by the Budget, and most of the other methods affect the manufacturer. He will pay, in certain parts of Canada, more

for the bituminous coal used in his factory, more for the oil used on his machines. Machinery, equipment and buildings material, which are not made in Canada, will have to pay the increased import tax.

Another point which must be remembered is that there are many manufacturers in Canada who will derive no advantage from the increased protection. They have their markets, as safely under the old tariff as under the new, but they will have to pay more for their raw material and the special taxes are inevitable.

The stamp taxes will take a heavy toll from the manufacturer. An extra cent on a letter is not much to a man who writes occasionally to a friend but it means a hundred dollars to a manufacturer every time he sends out a ten thousand letter circular, to his customers. A tax of two cents on a cheque is a trifle to a man who issues two or three a month but it may mean a hundred dollars a month to the manufacturer. Similarly, the taxes on cables, telegrams, money orders and postal notes are principally paid by manufacturers and other business men associated more or less with industrial activity.

A manufacturer who keeps twenty travellers on the road will also pay a considerable amount of money in taxes on railway, steamship tickets and sleeping car tickets.

If the tax on fire insurance is passed on to the insured, the manufacturer, who has to carry large risks, will have to pay larger premiums.

The tariff increase, gives the manufacturers more protection, but the budget, taken as a whole, makes them pay for a considerable part of this protection.

How Consumers Are Affected.

CONSUMERS are asking, "How will the new revenue raising measure affect us?"

The word "consumer," in its broadest sense, includes practically everyone. Manufacturers consume raw material. Railroads consume, merchants consume. But in the narrow and more generally accepted sense "consumer" is used to designate the individual in his relation to articles for which he has personal and intimate use, such as food and clothing.

In both the broad and narrow sense, consumers will have to pay slightly more for some of the articles which they consume. "Taxation imposed by increased customs duties bears upon all classes," said Hon. W. T. White in his Budget speech, "because all are consumers, and in paying additional taxation each member of the community will feel that he is to that extent contributing to the cost of the war and the defence of his country."

But the consumer, speaking now of the popular conception of the term, say the head of a family in average circumstances, will find a bright side to the budget when he contemplates the list of articles exempted from additional duty. One of the chief of these is anthracite coal. The consumer pays no more for his furnace coal. No tax has been placed upon fish, arrowroot, cornmeal, wheat-flour, biscuits, limes and lime juice or cocoa beans. No further tax has been levied on sugar and tobacco. Books and newsprint paper have also escaped. Educational apparatus and surgical instruments are exempted; consequently, school and doctor bills will have no excuse to rise.

Fear has been expressed that manufacturers will take advantage of the higher tariff to increase their prices to consumers, but we do not think this will be done to any extent. It must be remembered that any goods can only be imported for one or more of three reasons; the imported goods are cheaper or they are better or they are not produced in Canada. Quantities of foreign goods are constantly imported by selling them under home prices and the increased tariff rates will tend to bar out these cheaper foreign goods, and allow Canadian goods to be sold at regular rates. Moreover, Canadian manufacturers are too anxious to sell to favor raising prices. The selling price of manufactured goods falls rather than rises in hard times.

To the great mass of individual consumers, the tariff increase will be practically negligible. What do individual consumers import? Part of their clothes, food, furniture, automobiles and building material. These are the chief items. Those who persist in buying these goods abroad will have to pay a little more for them. Those who buy them at home will escape even this small increase.

As for the special taxes, the consumer, especially if he is a poor man, is scarcely affected at all. An extra cent on an occasional letter, two cents for a stamp to draw money from his bank, these will be light burdens.

The fundamental thing about the budget taxes is that they are levied according to spending power. The great spenders will pay the greater part of the taxes; the small spenders will scarcely feel their share.

How Farmers Are Affected.

FARMERS were given especially good treatment by the Government in determining where the new taxes shall fall.

No tariff increases were made on mowing machines, harvesters, reapers and parts thereof, nor on the raw materials from which such implements are manufactured. Traction ditchers, binder twine and all articles entering into the manufacture of binder twine, also escaped.

Stock raising was also encouraged by the exemption of pure-bred animals, including fowls. Fruit growers will not have to pay additional taxes for nicotine sulphate, which is used for spraying.

As consumers, farmers will have to pay higher duties on some of the goods which they import, but as farmers are not, as a rule, extensive importers, they will not be affected to any great degree. The special taxes on bank circulation, loan and insurance companies, travel, telegraph companies, and the stamp taxes will scarcely affect them at all.

On the other hand the new tariff increases by seven and one-half per cent. the farmers' protection on horses, beef cattle, poultry, vegetables and other products, thus reducing proportionately competition from abroad in the farmers' most cherished asset, the Canadian home market.

The Ceaseless War.

THE appalling destruction wrought by the present European conflict tends to distract attention from another type of war, devastating and deadly—the war waged by fire against property. Fire fights without truces, or treaties, steadily rolling up its black total of waste and loss. In the current issue of the *Quarterly* published by the National Fire Protection Association, appears the fol-following summary of the losses from fire in the United States and Canada:—

Year.	Fire Loss
1911	$234,337,250
1912	225,320,600
1913	224,723,350
1914	235,591,350

The same authority says that the total fire losscs in the United States and Canada, for the past thirty-eight years have reached the amazing total of $5,866,981,025.

Even though other battles engage us, we must not relax the struggle against the old enemy—Fire.

Making Pulp in Canada.

IN 1913, for the first time in the history of the Canadian pulp industry, the greater part of the pulp wood cut in Canada was manufactured at home. Sixty-four Canadian pulp mills report a total consumption of 1,109,034 cords, a slightly greater amount than was exported in an unmanufactured condition. Quebec is still our greatest producer of pulpwood, but the showing made by Ontario, Nova Scotia and New Brunswick is steadily improving. In British Columbia, the industry is only in the initial stages, and it is in this province that the greatest development will be probably made during the next few years.

The goal to be attained is the manufacture in Canada of all our pulp wood.

Literacy Test in United States.

THE literacy test clause in the United States Immigration Bill, which proposes to bar out immigrants who cannot read or write, is a further attempt on the part of the American Federation of Labor to maintain a monopoly by restricting competition. After being approved by the Senate the Bill was vetoed by President Wilson, but Congress has the power to pass it over the President's veto.

The Federation of Labor's assumption that literacy is essential to citizenship will not endure examination. Many of the mechanics and artisans who are responsible for somc of the best work now existing in Europe, were innocent of the accomplishments of reading and writing, while, on the other hand. considerable mischief has been done by people who were the masters of both. In Canada, among our pioneers and industrial workers, there are many who are reputable and self-supporting citizens, evcn though they put their crosses on chequcs and read their newspapers upside down. Also, there are many, "remittance men" for cxamplc, who can speak many languages but ask for work in none.

The only immigrants who should be barred from either Canada or thc Unitcd States, are the criminal, the diseased and any considerable number of those who will not assimilate with thc native population.

President Wilson is at least consistent when he holds that the principles of the anti-trust laws are applicable to the labor trust.

Incidentally, if literacy were made the supreme test for membership in the United States federated unions, what a thinning of the ranks might occur.

Nothing Rather Than 85 Per Cent.

A NUMBER of men employed by National Iron Works, Toronto, prefcr no wages to 85 per cent. of their wages. This decision was reached at a meeting where it was decided not to resumc work until a 15 per cent. cut in wages, made last September, was rescinded.

It is natural that they should not relish the cut. No decrease in wages, salaries or incomes is popular or desirable. But it must bc remembered that the income of the National Iron Works has decreased much more than 15 per cent., which is also neither popular nor desirable.

Under present conditions it is reasonable to assume that the only duty of manufacturers in regard to wages is to maintain the former rate if their business has not suffered, and if their business has suffered to pay what they can. Surely 85 per cent. of a loaf is better than no bread.

Ocean Rates.

MANUFACTURERS read with approval Sir George Foster's recent statement in the House of Commons that he intends to engage a rate expert to investigate freight rates, especially ocean, lake and river rates.

We hope that something will be done to ease the burden of advancing water rates. Export trade has been decreasing and rising freight rates tends to depress it further. Relief is urgently needed and we trust that the Minister will persevere in his good intention.

Practice and Preaching.

A REPRESENTATIVE of a foreign firm called at the office of the George B. Meadows Toronto Wire, Iron and Brass Works Co., Ltd., recently and offered iron bars from $20 to $45 per carload below Canadian prices. The offer was promptly refused by Mr. Meadows, who has instructed his purchasing agent to buy only in Canada. This is an example of consistency which must be widely followed if the made-in-Canada campaign is to be effective.

THE MACHINERY CATALOGUE IN THE MAKING

By Legg Bros., Toronto.

LET it be impressed in the beginning that the purpose of a catalogue is quite unmistakable. It is not sent out to exploit the personal work of the artist who designed it, or the typographical mannerisms of the compositor who set it up in type. It is intended to sell or help in selling a certain line of goods, whether it be pianos, kitchen stoves or machinery. Each class of publications imposes conditions upon the "Engraver and Printer" which are in some manner peculiar to that class.

Engineering catalogues, having for their main purpose the accurate illustration and description of steam, electrical or mechanical apparatus, require of the compiler an exceptionally careful study of good form. Dealing with standard forms and types of machinery has, in its own subject-matter a strong human interest for every one whom the publication is intended to reach. It is this interest upon which the work must chiefly depend for its success, and to the deepening of which the effort of the producer must go out.

Photographing Machinery.

The catalogue cannot be of the highest efficiency unless the machinery to be illustrated is properly "posed" to show to the best advantage, the important selling features of the mechanism, with careful regard to perspective and the unavoidable shortcomings of the camera. This feature must never be lost sight of at any stage of the work, either by the artist, the engraver, the copywriter or the printer.

The illustrations being accepted as the centre of interest and being worked out as such, affect all the elements of the catalogue. For a given group of illustrations a standard of size must be established which will allow engravings to be made on a scale exactly meeting the requirements of the principal subjects, the others being subordinated to those in something like a true ratio of their importance. It is not ordinarily important to show very large engravings, and it may be laid down as a safe rule that mere bigness, either of cuts or catalogue, is not to be sought except for certain special lines of work. An unwieldy bulk is usually a disadvantage to a catalogue, aside from the question of cost.

Of greater importance than the size of the cuts is the proportioning of the cuts to the surrounding white space, and the right size and shape for the catalogue cannot be determined upon without giving the closest attention to this relation of cut to page. An engraving of an important machine needs ample room to be seen to advantage, precisely as the machine itself would if it were on exhibition.

Engraving Methods.

As the value of a machinery catalogue rests, as stated, upon the character of the illustrations, the importance of the choice of medium employed and the care of making them is apparent. The current methods of engraving especially adapted to this work are two—"woodcuts" and "half-tones." The half-tone plate at present enjoys a vogue in mechanical catalogue work, no doubt owing to the fact that the result is a softly-rounded picture of extreme delicacy, affording a relief to the eye and at the same time retaining the mechanical precision and the technical details. The half-tone engraving, with a carefully vignetted background, skillfully printed on high-grade coated paper, gives a fine effect, but the same plate hastily printed on poor paper can give only worthless results. This vignette becomes a positive blemish, and in cases where anything but a high-grade stock and presswork are used, should be removed and the engraving made close-cut. However, here is where the wood engraving reveals its own peculiar advantages. If the engraver devotes sufficient care to the work he will produce results from a pictorial standpoint quite up to the standard of the half-tone plate, and the lines of the woodcut being cut by hand and of a hard and sharp nature, are less apt to become fouled from ink and will retain to a greater extent their sharpness on inferior or rough uncoated paper stocks.

When half-tone engravings are chosen to illustrate the catalogue the following point must not be ignored—the photograph of a machine no matter under what ideal conditions it has been taken will show blemishes, loss of details and mechanical inaccuracies, which will have to be removed, and here is where a considerable portion of your cost of production will have to be met. To prepare the photograph or drawing for the plate-maker the "Retoucher" has not only to be an artist but a skilled workman, thoroughly conversant with all lines of mechanism, and on him rests a great deal of the selling force of the illustration. He must have the fine perceptibility to devote his work chiefly to the essential features of the subject, allowing the non-essential elements to be left at least partially in the rough. This is where a great many mechanical illustrations lose "their punch." Inexperienced workmanship, often induced by the customer's attempted cost saving has ruined many an otherwise good piece of work. You can buy half-tones by the square inch, but never attempt to purchase retouching on the same principle.

The Tint Block.

Brief mention may be made at this point of the "tint block" as a means of enhancing legitimately the pictorial value of a piece of machinery. Caution employed, a delicate tint laid under the black impression produces a highly attractive picture. The qualities of roundness and depth, so hard to obtain in the case of a mechanical subject, may thus be enhanced and if the tint is not too heavy the mechanical detail will not be lessened. This method seems to afford the safest way of embellishing a catalogue of machinery.

As to the choice of "types" simplicity and dignity should be the watchword. There are products of a printing house in which the typography may properly be of itself the object of primary interest, and to which brilliant and highly colored treatment may be fully applied as a means to reach the reader, but not so with mechanical literature. Any typographical trapeze work inside the two covers which retains the eye of the reader for an appreciable time is so much energy wasted.

In the choice of stock (paper and ink) no subject lends itself to simple black and white more than the pictorial treatment of iron and steel, while a frontispiece in tri-color, or some modification of it, might not be amiss. Any form of highly colored treatment should not be considered. In fact the machinery catalogue that is conservatively dignified and scientific will produce the greatest "sales."

In summing up let us remember these five points:—

First—Illustrations of the highest order.

Second—A tastefully designed cover.

Third—Uniform and abundantly wide margins.

Fourth—Very legible typematter.

Fifth—Good quality of paper.

ELEMENTARY NOTES ON THE CATALOGUE AND ITS PRODUCTION

By Wm. H. Brigden, Printing Department, Brigdens, Limited, Toronto

MANUFACTURERS there are who regard the catalogue as a necessary evil. With much agony of mind, they allot its cost to General Expense, deputing a junior to its compilation with stringent instructions to "keep down the cost." They regard with horror the abortion which is the outcome of the callow youth's labor and rave over the bill for "Extras" which has been involved in the endeavor to bring some semblance of order out of the jumbled "copy."

The Purpose of the Catalogue.

Realize that the mission of the catalogue is to incite inquiries, to pave the way for the traveller, and to be an ever-present "silent salesman," and it falls at once, naturally, under the heading of "selling expense." Representing the house and the product, the catalogue should embody the same ideals of production and service as obtained in the factory. It should have the same personal study as any other feature of the business and in its initial stages, share the combined consideration of the management, superintendents and salesmen.

Its Preparation.

The "copy," however prepared and assembled in the first instance, should be carefully arranged and edited by an expert before it reaches the compositor. Here no apprentice hand should practice. It is just here that the manufacturer often balks. The ill-arranged and imperfect copy goes to the printer to be scored, and changed, and added to on successive proofs till temper is lost and a bill of costs for "alterations" run up which far exceeds any fee that would have been paid for an expert's services. It cannot be too strongly emphasized that estimates are based upon the copy submitted and alterations after the type is once set must be paid for as extras. By far the more economical method is to revise on the "copy" beforehand and not on the proofs.

Its Contents.
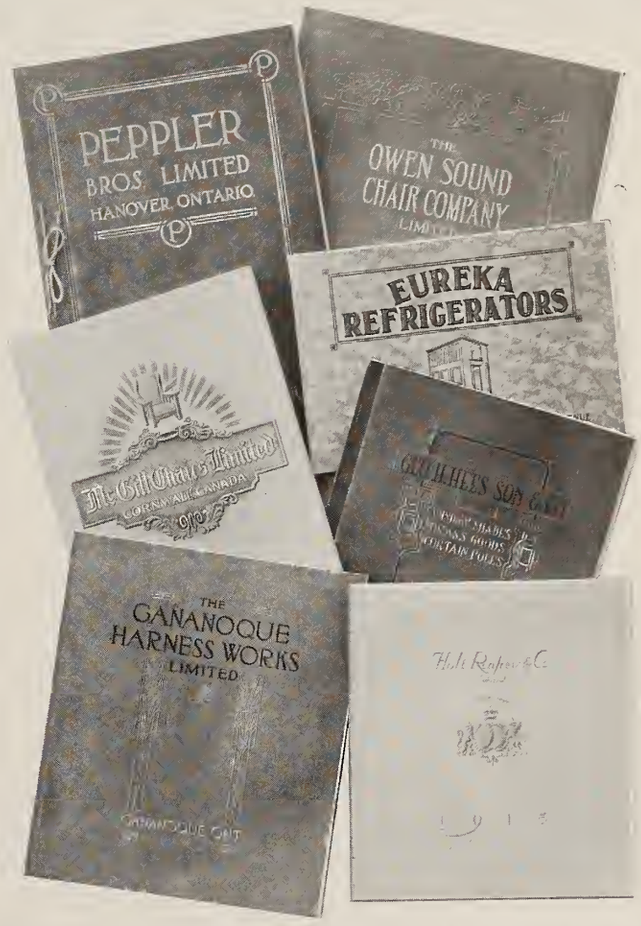
A catalogue may be a reference book for the retailer—a priced inventory of goods kept or supplied by the wholesale merchant or factor; or, a direct salesman for the mail order house. These fulfil a purpose and require a treatment of their own. Our immediate concern is with the manufacturer's catalogue, and even here "custom can never stale its infinite variety." In some lines—furniture for instance—the main study should be in the method of classification and grouping. In others, particularly those propounding novel or labor-saving appliances, the special merits of the machine or appliance should be clearly demonstrated—how it may save time and money and enable its possessor to get ahead in the game.

Its Dress.

The make-up" of the catalogue should be in keeping with the product. For example, it is evident that the light airy effect suitable for a millinery brochure, would be out of place in a book dealing with a foundry product, which should give an impression of solidity and strength by its bold and simple handling. The piano-maker will justly call for an artistic and symbolic treatment, while the book of agricultural implements may bear a strong dash of color, appealing to the man who every day is in touch with the rich tones of nature. Distinctiveness which enables a certain catalogue to be spotted instantly from amongst its neighbors may be secured by its cover color being selected in strong contrast to all those adopted by competitors in the same line.

Its Size.

No ideal method has yet been devised of arranging the heterogeneous sizes and shapes that flow into the office and which to be of use, must be quickly located. The Ontario

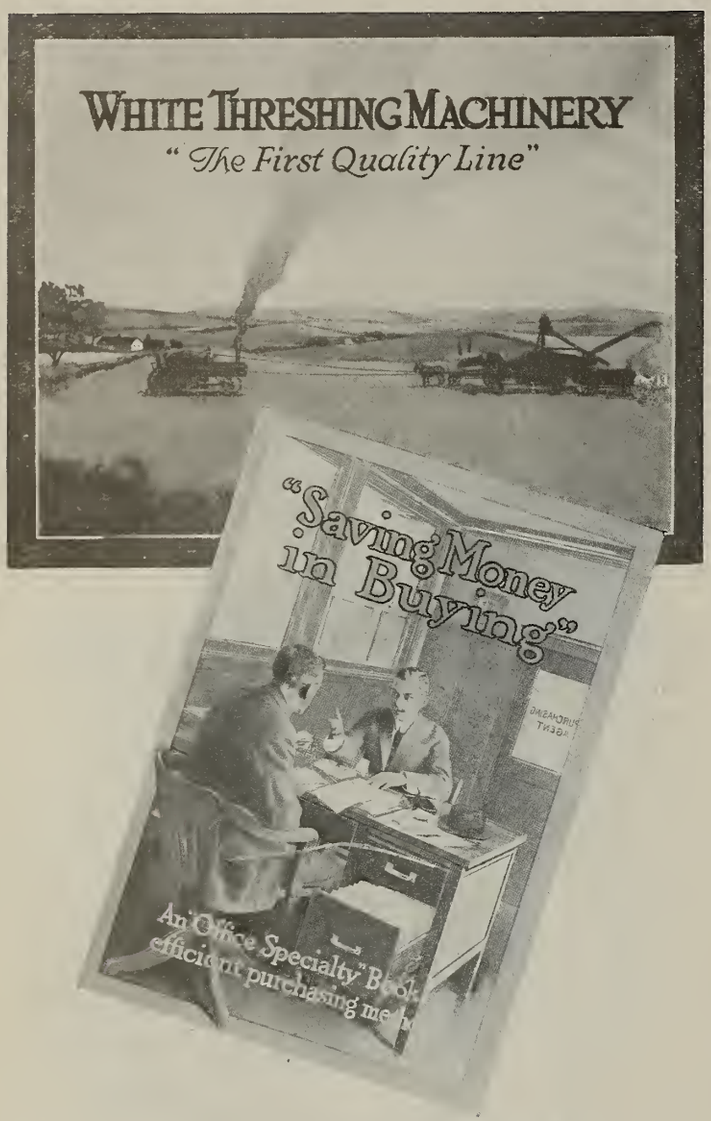


Group of Catalogues from the Plant of Brigdens, Limited, Toronto.

Association of Architects are advocating the adoption of two standard sizes (already accepted by the American Institute of Architects) for all catalogues kept for reference in their offices—a general size of 8½ in. x 11 in. and a pocket edition of 3¾ in. x 8½ in. While there is much to be said in favor of at least an approximate uniformity in size, there is little reason in the chaos which reigns at present.

Its Illustration.

Pictures are the universal language. To urge the necessity of illustrations in a catalogue, would assume a lack of intelligence on the part of the manufacturer, but to justly represent the quality of the goods, "quality engravings," intelligently prepared, must be employed. They should be as far as



Agricultural Machinery and Business Catalogues, by the Curtis Company, Windsor, Ont.

possible of uniform quality. If produced at various times, the engraver should be furnished with proofs of those already in hand with instructions to secure harmony of tone and finish. While due consideration must be given to cost, both in this as in other features, such should not be allowed to operate to the degradation of the catalogue till it fails to sustain the reputation of the house or the goods it represents. A few battered and worn electros scattered amongst high-class engravings will be as fatal in their effect as a bomb in a Gothic cathedral tower.

Foreign Editions.

Live manufacturers will ever seek wider spheres of sales in order to keep their plants up to capacity production. The present disturbance of the world's trade channels undoubtedly offers special opportunities to producers of some lines of goods. South American countries offer probably the most immediately promising fields for Canadian products. Those who seek to avail themselves of this opportunity will, wisely, first make a study of the needs and peculiarities of the countries to which they send. The catalogue must be adapted to the idiosyncrasies and tastes of the people to whom it is intended to appeal. Translation into the language is imperative—to send otherwise is worse than foolish. The translation and arrangements must be entrusted to one not only familiar with the language but with the customs, currency, business methods and needs of the country. He, too, should be consulted as to the external appearance so as to secure the most appealing effect. Illustrations should be even more freely used than in the home edition. Special information as to packing, transportation, customs regulations, methods of collection and other matters helpful to the foreign buyer, should not be forgotten.

Mechanical Production.

The limits of this article will not permit more than a passing reference to the printing, binding and wrapping. Essential as are these details to the success of the catalogue in its mission, it must suffice to say that an ideal decision is not found in the selection of the lowest tenderer amongst a dozen competitors for the work. The choice of paper, of cover stock, of type face, of the style of binding, of envelope or other protector, and similar items, are all important, but infinitely more is the assurance that the firm undertaking the contract has a staff of mechanics and supervisors specially trained for catalogue production with true ideals of harmony and quality, as well as an equipment equal to every emergency.



Attractive Work of Southam Press, Limited, Toronto.

THE SALES CATALOGUE

By J. R. Zwick, of the Curtis Company, Windsor, Ontario

THE word "catalogue" is a term applied to a great variety of books and booklets. A catalogue may contain from four to a thousand pages. A catalogue is a book, but a book is not necessarily a catalogue. So varied is its application, that the word "catalogue" may mean almost any kind or size of book and can describe a multitude of commodities.

It is the fundamental and well-defined purpose of most catalogues, directly or indirectly, by themselves or in conjunction with some other selling power, to create a sale.

Of course, there are publications masquerading as catalogues that are intended as books of reference and in reality are only lists. There are good advertising books and booklets which are not catalogues. These two we will exclude from our delineation on a catalogue, and speak only of what we will term a "sales catalogue."

The Sales Catalogue Proper.

The selling points of such a catalogue, then, are really the only ones which interest us. In a few words, these points constitute a good general appearance, and a text so clearly printed and well written as to command and hold the reader's attention.

To start with our brief description of a sales catalogue we will say that the cover is an open window, through which an outsider sees the inside. It must be inviting; it must be a bait for the inside. A good cover should embody lettering or illustrations, or both, that will appeal strongly to the reader's inner self and demand an entrance to what is inside the cover.

On the inside pages of the catalogue, the illustrations of the goods and their adaptability are probably the most important factor.

The sales catalogue should be illustrated by good convincing illustrations and it is not complete without them. The descriptive matter or captions with these illustrations are best to be plain and concise and so linked with the picture that the writer does not have to look for them.

The copy or text should receive our next attention, and must necessarily be so simple and plain that people with ordinary intelligence can understand it. Simplicity is appreciated by everybody because it is understood by everybody. The copy should have a certain amount of punch behind it so that it may be imbedded deeply in the reader's mind.

Then, too, the illustrations and text of the catalogue must be built into one harmonious unit with just the right amount of decoration. When your story is told make it good to hear and pleasing in its physical form.

The good catalogue is the one that exactly fits its subject with all these vitals taken carefully into consideration, but it does not follow that the most expensive one is always the best.

It is the careful assembling of all these component parts—or selling points—of a catalogue by a firm of advertising specialists that gets the ultimate result aimed at.

CATALOGUES AS AIDS TO "MADE-IN-CANADA"

By A. L. Lewis, Manager, Southam Press, Limited, Toronto

THERE never was a time—and possibly never will be again—when a greater opportunity presented itself to the Canadian manufacturer than to-day.

A far-reaching sentiment in favor of "Canadian-made Goods" is sweeping over the entire Dominion, which the enterprising manufacturer can capitalize if he has faith in himself, his product and his country.

The pessimistic manufacturer will naturally "lay low"—the energetic manufacturer never.

People are buying all the time and will continue to do so, war or no war, hard times or no hard times. They may not buy as readily, but one thing is certain they are more likely to buy from the man who advertises, than from the one who does not.

There is no more economical, safer or more profitable method of dispelling dull times as far as the manufacturer is concerned than by a consistent appropriation for advertising—and especially by employing the greatest salesman known to man, the one which is always on the job—The Catalogue.

This is particularly true of the manufacturer who is endeavoring to reach home markets.

Co-operation is Necessary.

There is only one "best way" of issuing a catalogue—that is by co-operation between the manufacturer and the printer. The manufacturer knows his goods, the printer knows how to merchandise them.

The "up-to-the-minute printer" is a business man—the output of his plant is a necessity—a commodity just as much in demand as good stuffs or wearing apparel. It is the printer's business to advise his customer, and to produce a result which will be mutually profitable.

The catalogue must be adapted to its purpose. It should be technical if it is to reach technical people and general if it is intended for the public.

The contents of any catalogue, whether technical or general, must tell its story in about the same way, as a well-informed salesman would orally present the advantages of his goods. As a matter of fact, it should go farther and the information should be more concise and more carefully expressed than "word of mouth." Its preparation should be studied and restudied.

Things to Leave with Printer.

The selection of the articles naturally rests with the manufacturer but the proper displaying of these, the size and shape, the arrangement, in fact everything in connection with the production of the catalogue should be determined with the assistance of the printer—that is his business.

The kind of engravings best suited to display the particular line of goods catalogued and the selection of the paper that will show these engravings to the best advantage;

The selection of cover stock and its decorative treatment—a very important feature of the modern catalogue;

The typographical appearance—the use of type faces in keeping with the subject and their proper arrangement;

The modern printer's training is along these lines and a great deal of time and money can be saved by consultation with him.

Looking at the catalogue business from every viewpoint the maximum results can be most readily attained at the minimum cost by hearty co-operation between the manufacturer and the printer.



Designed and Printed by the Herald Press, Montreal.



Lettering Effects by the Reid Press, Limited, Hamilton.

CATALOGUES FOR CANADA AND ELSEWHERE

By G. F. Hobart, The Reid Press, Limited, Hamilton

IT is a platitude to say that the catalogue as the silent representative of the firm, should be like the salesman, of good address and neatly apparelled. The manufacturer who does not appreciate excellence in stock and craftsmanship, is not likely to be a reader of INDUSTRIAL CANADA and may be disregarded. Both dress and address, however, are merely means for securing attention and something more is required if interest is to be sustained. The dictionary defines a catalogue as "a list or enumeration of names, titles, persons or things, generally in alphabetical order and sometimes with explanatory additions." Strictly speaking, therefore, the elaborated picture books issued by manufacturers and entitled "catalogues" are true to name and type. If the object is to furnish buyers with a convenient book of reference, the well-printed catalogue performs its functions admirably. If, however, the intention is to make the catalogue a business producer for the firm, it falls short of the requirements, as it does not possess the attributes of a properly constructed advertisement. It is claimed that people will not read descriptive text matter. That finds its explanation in the fact that the letterpress is generally not worth reading. It is possible, however, to introduce real human interest into a catalogue and thus secure the continuity of attention that will result in retention or memory.

Long vs. Short Catalogues.

It is not true that people will not read extended descriptions, provided, of course, that the matter is made interesting. A large motor company in the United States recently departed from its usual custom and published 2,000 word advertisements, without illustrations. It received more replies than it had from the heavily typed and illustrated announcements and many of them were from bankers, a class it had almost despaired of reaching through newspaper publicity. Catalogues should be educational and give the dealer or consumer, as the case may be, some information that will have either a utilitarian or an aesthetic value. A furniture catalogue, featuring period styles may be taken as an example. A short historical outline of the influence of the Stuarts on the art of their time, would be instructive.

Catalogues for Foreign Readers.

The essential difference between catalogues for domestic and foreign distribution is that the one to be sent out of the country should emphasize in particular the standing of the firm and in general, the advantages of Canada as a manufacturing and distributing country. A few pages could be devoted to pictures illustrating the source and availability of the raw material. Reproductions of scenes on Canadian farms, mines or forests would add to the interest in catalogues of firms manufacturing starch, sugar, wire goods, machinery or paper. In catalogues the purpose of which is to develop exports, it is necessary to advertise Canada and its advantages in addition to picturing the particular firm and its products. Finally, it is the duty of catalogue printers to place at the disposal of their clients, the services of trained illustrators and writers. The days of the printer will not be long who secures orders by the persuasive eloquence of a suave salesman and then sits down to wait for copy and cuts. Efficient service is as important as sterling integrity and adept workmanship.

VITAL FEATURES IN CATALOGUE MAKING

By J. F. O'Keefe, The Herald Press, Montreal

CATALOGUES may be divided into two classes:—the large durably bound volume, the circulation of which is among business houses only, and which is distributed to a limited and known list of names—and the smaller catalogue, or booklet, as it is more commonly called, which is sent broadcast to every prospective buyer, dealer or consumer, who evinces any interest in the goods advertised.

The first named catalogues are invariably preserved and are unconditionally apportioned a handy place on some bookshelf where they will admit of ready reference. These catalogues, as a rule, are published only by the large jobbing houses and are sent out at long intervals of time—a year or two apart. Because of the great amount of handling to which they will be subjected such catalogues should be strongly bound and well printed on good quality of paper. They should be carefully indexed and have all matter so conveniently arranged that no time will be lost in locating any article. In printing such catalogues the greatest care should be exercised in checking over proof to make sure that errors do not creep in. Photographs should be carefully retouched to bring out the strong points and force minor details into the background. The cuts should be well etched and uniform throughout the book.

The Small Catalogue.

The small catalogues range in variety from a little booklet advertising a single article or a line of goods to the great, cheaply-printed book of a thousand pages as produced by the large mail order house. Such booklets are mailed to the public or the retailer, according to the market, method of distribution or purpose to be accomplished.

When written for the public they are usually mailed in response to inquiries received from readers of newspaper or magazine advertisements. Frequently they are sent to a list of names supplied by the dealer, or else a quantity of booklets are sent to the dealer for personal distribution by him.

When written with the idea of interesting the retail merchant the booklet is almost always sent out to those dealers who carry the line, without awaiting a request from them.

All such books, whether for dealer or consumer, should be planned and printed with several very important points ever foremost in the manufacturer's mind.

Remember first, that all your competitors are issuing booklets, besides nearly all other manufacturers supplying the other lines handled by dealers who carry your goods are also sending out booklets or some other form of direct advertising. Even the consumer receives more than either he or she would ever care to consider thoroughly, let alone preserve. Thus it behoves the manufacturer in the face of such a condition, to give to his booklet a character that will force it out from all such competition sufficiently to gain the prospective buyer's notice.

The gaining of attention should be the first consideration. An attractively designed cover, in striking, harmonious colors,

well printed on good stock, with a booklet well shaped and convenient in size, these are the essentials in attention getting.

Second, the attention should be held. In other words an interest must be awakened—an interest sufficient to lead the buyer to open the pages, look through the booklet, turn back to the first page and begin to read. This is accomplished also by appearance. The size, style and arrangement of type, which make reading easy or difficult—the choice of illustrations, the character of the cuts, apportioning of margins, the harmony and balance of the pages, all have an enormous influence in awakening interest even in subjects that are usually as dry as the Sahara. This style, as the advertising specialist calls it, is never the result of accident. It is never accomplished by the old-time "journeyman." It can be produced only by an artist-compositor of good taste—a man of unerring judgment, with a keen sense of proportion, and a knowledge of the psychology of the printed page.

Third: The subject matter must be interesting. The article must be well written, not by the chief clerk, book-keeper, or stenographer, but by a trained advertising writer.

Fourth: The copy must have, in addition to interest, a convincing quality that will cause the reader to believe what he reads is true, and to want the article he reads about. A desire must be awakened. And there are certain little ways to move the will—hidden suggestions of the need for immediate action, etc. Order blanks that make it easy to order and remit should always accompany catalogues when business is wanted direct, or when sold to the public through dealers only, the local merchants names should always be supplied.

An important subject to consider here is the keeping alive of the big annual catalogue after it is sent to dealers. Interest can be stimulated in this by calling attention to certain lines of goods at frequent intervals, emphasizing certain features of improved service, added quality, selling suggestions, business news pertaining to the line, etc. A well-edited, well-printed house organ will accomplish wonders in this direction—keeping interest at the top notch and stimulating trade as nothing else will. Incidentally the house organ can be made a periodical catalogue in itself.

NEW MANUFACTURING COMPANIES.

The following companies have been recently incorporated for manufacturing purposes:

Location. Companies.	Capital.
Winnipeg, Man., Manitoba Concrete Post Co., Ltd..	$25,000
Winnipeg, Man., Gibb Seal Co., Ltd.	100,000
Winnipeg, Man., Canadian Shirt & Overall Co., Ltd.	60,000
Calgary, Alta., Calgary Tanning & Mfg. Co., Ltd...	25,000
Calgary, Alta., Prenderville Brick and Terra Cotta Co., Ltd.	500,000
Edmonton, Alta., Enterprise Clays, Ltd.	500,000
London, Ont., Middlesex Mills, Ltd.	80,000
Toronto, Ont., Ideal Bread Co., Ltd.	500,000
Doon, Ont., The Dominion Fibre Co., Ltd.	40,000
Lucknow, Ont., The Sepoy Mfg. Co., Ltd.	20,000
Fergus, Ont., James Gow Lime Kiln, Ltd.	60,000
Tara, Ont., Tara Mfg. Co., Ltd.	40,000
Port Elmsley, Ont., The Globe Graphite Mining & Refining Co., Ltd.	500,000
Toronto, Ont., Visc-Richardson, Ltd.	40,000
Toronto, Ont., Auto Heater Co., Ltd.	500,00
Pembroke, Ont., Wiarton Woollen & Knitting Mills, Ltd.	50,000
Hamilton, Ont., The Globe Electric Machine Co., Ltd.	$40,000
Toronto, Ont., The Federal Steel & Foundry Co., Ltd.	1,000,000
Toronto, Ont., Doust Specialty Co., Ltd.	40,000
Toronto, Ont., Canadian Aluminum Goods Supply Co., Ltd.	100,000
Toronto, Ont., Universal Wall Paper Co., Ltd.	100,000
Toronto, Ont., Commercial Electrics, Ltd.	500,000
Toronto, Ont., Textile Mfg. Co., Ltd.	50,000
Chatham, Ont., The Chatham Packing Co., Ltd.	400,000
Ottawa, Ont., Leather-Canvas-Textile Mfg. Co., Ltd.	50,000
Montreal, Que., National Jewelers, Ltd.	150,000
Montreal, Que., Kieran Crawford & Gray, Ltd.	50,000
Ingersoll, Ont., Ingersoll Machine Co., Ltd.	40,000
Toronto, Ont., The Radiant Sign Co., Ltd.	50,000
Cumberland, Ont., Eplett Mfg. Co., Ltd.	100,000
Ottawa, Ont., Ontario Specialties, Ltd.	100,000
Toronto, Ont., Automatic Paper Box Co., Ltd.	125,000
Montreal, Que., International Lime Co., Ltd.	200,000
Montreal, Que., Tate Electrolytic Waterproofing Processes, Ltd.	300,000
Peterboro, Ont., The Sweetmeat Co., Ltd.	200,000
Toronto, Ont., Canada Universal Nut Lock, Ltd...	100,000

BRITISH WAR ORDERS IN CANADA.

Total Contracts Placed with Canadian Firms Amount to $12,894,500.

The following orders were placed in Canada up to February 9th by the British Government, for equipment and clothing, according to authentic information that has been furnished to INDUSTRIAL CANADA.

Equipment:	
Posts, pickets	$50,000
Pegs, pickets	200,000
Tins, mess	250,000
Tins, mess covers	1,000,000
Collars, head (harness)	62,000
Accoutrements, sets	90,000
Shovels	120,000
Helves	260,000
Lumber	....
Miscellaneous	....
Clothing:	
Greatcoats, service dress	100,000
Jackets, service dress	500,000
Trousers, service dress	500,000
Coats, sheep-lined	50,000
Drawers	1,641,000
Vests	200,000
Sweaters	52,000
Caps, comforter	606,000
Boots, rubber	25,000
Lace leather	1,000,000
Total value	$12,894,500

FRENCH WAR ORDERS.

The French Government commissioned the Hudson's Bay Company to purchase $15,000,000 worth of war munitions in Canada, according to a statement made to INDUSTRIAL CANADA by one of the company's officials. The same authority said that it was expected that this amount would be supplemented.

TRANSPORTATION

By J. E. WALSH

Proposed General Increase of Freight Rates in Eastern Canada.

NOTE.—A study of the proposal to increase rates indicates that it is not worked out on any scientific basis; that is to say, it differs entirely from the proposition recently submitted to and allowed by the Interstate Commerce Commission. The increases proposed vary from 5 to 30 per cent.; at the same time it is proposed to discontinue certain commodity rates and revise the arbitraries used for constructing through rates. Full information may be had on application to the Transportation Department.

THE Canadian Freight Association, on behalf of the railway companies in Eastern Canada, under the jurisdiction of the Board of Railway Commissioners, have applied for permission to make a general increase of freight rates.

Arguments for Increase.

In support of the application the applicants state that:

(*a*) It is in the interest of the country at large as well as of the companies and their shareholders that further revenues should be obtained from the carriage of freight traffic.

(*b*) That the rate of return in net operating income upon the property investment of the companies has seriously declined.

(*c*) That the principal cause of this decline is the steady and constant increases in operating expenses due to matters of continuing character, such as wage increases, legislative requirements and the necessity of maintaining a higher standard of track equipment and facilities generally.

(*d*) That the return upon money invested in railway facilities in the territory in respect of which increases in rates are asked is unreasonably low and inadequate.

(*e*) The effect of these factors is to diminish seriously the borrowing powers of the companies and compel the obtaining of necessary capital at much higher rates of interest, thereby increasing fixed charges which must be met out of the net earnings, which have been decreased and will in all likelihood be further decreased by the necessity of paying higher rates of interest on any moneys borrowed.

(*f*) That in consequence of the exceptional conditions at present existing, various money markets previously open to the companies are now closed, the result being to very materially limit the sources from which money may be obtained.

(*g*) That among other grounds the companies will urge as a reason for the proposed increases the fact that after a full hearing the Interstate Commerce Commission recently made an order increasing the rates in the official classification territory to the South, notwithstanding the fact that in the opinion of the applicants the conditions under which the companies were there operating were much more favorable than those which apply to the applicants.

The changes proposed in rates are, briefly, as follows:

Class Rates.

(*a*) Standard Tariffs—

No advance proposed in tariffs based on standard mileage.

(*b*) Schedule "A"—

Tariffs based on Schedule "A" to be revised, making no change up to 25 miles; over 25 miles, first class rate to be advanced 2c. per 100 lbs.; fifth class rate, 1c. per 100 lbs. Rates for other classes to be figured on the basis of standard mileage scale, utilizing, however, the higher scale for the lower classes in the event of there being more than one scale for the same first class rate.

NOTE.—Schedule "A" referred to is the schedule of rates ordered by the Board of Railway Commissioners in what is known as the "International Rates Cases," after a full investigation of the complaints of the Canadian Manufacturers Association and shippers generally, who were heard and represented at hearings held by the Board in different parts of Ontario in 1906; and of the Board of Trade of the City of Toronto. This schedule is the basis for the present town or distributing tariffs, generally speaking, in the territory now affected, Montreal and West.

(*c*) Arbitraries to be used in constructing through rates to points in the Maritime Provinces—

A decrease is proposed in these arbitraries to points on the Canadian Pacific Railway, and on the other hand a serious increase to points on the Intercolonial Railway.

Commodity Rates.

The following advances are proposed on the commodities mentioned:

Billets, pig iron, wire rods, rails and crop ends carried on a "per ton" basis; ferro silicon (from Welland); iron ore concentrates; iron ore or crude oxide of Iron; iron bog ore; mill cinder and mill scale: See Table 1.

Table 1.

Where present rate is	Proposed Advance.
$1.49 per ton or lower.	5c.
$1.50 per ton to $2.49.	10c.
$2.50 per ton to $3.49.	15c.
$3.50 per ton to $4.49.	20c.
$4.50 per ton to $5.49.	25c.
$5.50 per ton to $6.49.	30c.

Cordwood, slabs, sawdust, shavings, edgings and mill refuse; logs, for manufacturing and reshipping; paving blocks; pulpwood; stone, artificial; stone, building (subject to existing mileage rates as a maximum): See Table 2.

Table 2.

Where present rate is	Proposed Advance.
7½c. or lower.	¼c.
Over 7½c. but not exceeding 12½c.	½c.
Over 12½c. but not exceeding 17½c.	¾c.
Over 17½c. but not exceeding 22½c.	1 c.
Over 22½c. but not exceeding 27½c.	1¼c.

Alum, China clay and sulphur (Chicoutimi to Jonquiere and Ouiatchouan, Que.); bark, tan; beer packages (empty, returned); cement and stone dust; charcoal (mileage scale); China clay (Three Rivers wharf to Grand Mere and Shawinigan Falls, Que.); coke, petroleum; cooperage stock and cheese-box stock; gypsum blocks; hubs, rims, shafts and spokes, from Norwood, Ont. (Proportional Rates); iron or steel articles carried under C.L. commodity rates; lime, specific commodity rates (subject to existing mileage rates as a maximum); lime, acetate of; lumber; magnesite ore; mica scrap or waste; molasses, final or sugar beet refuse; nitre

cake; pebbles (grinding), from Jackfish, Ont.; pitch; rags; salt; salt cake (Hamilton and sulphide to Quebec points); slag, furnace; vegetables, potatoes, both mileage rates and specific commodity rates; wire fencing and netting; wood pulp; wrapping paper and cores (paper); drain tile, concrete or earthen (special commodity rates other than from Shallow Lake to Toronto): See Table 3.

Table 3.

Where present rate is	Proposed Advance.
15c. or lower.	½c.
Over 15c. but not exceeding 25c.	1 c.
Over 25c. but not exceeding 35c.	1½c.
Over 35c. but not exceeding 45c.	2 c.

Alcohol, wood; ale and beer; bottles, glass; charcoal (specific commodity rates lower than mileage scale); excelsior; gas liquor; hides, green; marble, Stanbridge, Que. (Ex. Phillipsburg, Que.) to Ontario points; petroleum (crude and refined) and petroleum products, including fuel and gas oil; rice and rice flour (C.L.); shingles and siding, metal (winter rates); sludge or spent acid; acid slugs; sulphur, in bulk, C.L.; tar (coal and petroleum); tin cans; granite: See Table 4.

Table 4.

Where present rate is	Proposed Advance.
25c. or lower.	1 c.
Over 25c. but not exceeding 35c.	1½c.
Over 35c. but not exceeding 45c.	2 c.

In addition to the above it is proposed to in all cases advance specific commodity rates, varying from one-half to two cents per 100 pounds, and likewise make a corresponding advance on such commodities as are carried at class rates lower than called for by the classification. As an illustration—Acids are now classified at tenth class. The new seventh class is proposed.

Binder Twine—It is proposed to advance the present rates on this commodity from Welland, Ontario, to maintain the relationship with the rates from Auburn, N.Y.

Asbestos Shingles and Asbestos Corrugated Roofing—Present basis, seventh class. Advance, proposed seventh class.

Bleach, Bleaching Powder and Caustic Soda—The present rates on these commodities from Windsor and Sandwich, Ont., are based on the rates on like commodities from Detroit, Mich., and it is proposed to advance the rates to conform with the advance made recently from Detroit.

Canned Goods—	Proposed Advance.
From various points to Montreal, Que., and Ottawa, Ont.	85% Montreal, fifth class.
Maritime Province points.	Established arbitraries over Montreal.
To points east of Montreal other than Maritime Province points.	Classification basis.

Cheese—Special commodity rates to be advanced 2c. per 100 lbs., subject to the proposed fourth class rate as a maximum.

Clothing, Oiled—Present Basis—	Proposed Advance.
To Montreal, third class.	Proposed third class.
To points east of Montreal, third class to Montreal plus authorized arbitraries.	Proposed third class to Montreal plus authorized arbitraries.

Coal and Coke—	
Commodity rates from Detroit, Lake Erie ports, Niagara frontier, Lake Ontario ports and St. Lawrence gateways.	10c. per ton.
Where through rates from U.S. points are published, Canadian lines' proportion will be advanced.	10c. per ton.
Specific commodity rates between Canadian points.	10c. per ton.
Coke, Gas House.	10c. per ton.
Earthenware, Rockinghamware, Stoneware and Yellow-ware—	
Present basis, fourth class.	Classification basis.
Flax Straw—	
Present basis, tenth class.	Proposed tenth class.

Fruits, Fresh, C.L.—From stations in Eastern Canada, taking Toronto-Montreal rates very substantial advances are proposed.

Glutrin Road Binder, Glutrin Core Compound—	Proposed Advance.
Present basis, seventh class.	Proposed seventh class.
Grain and Grain Products, C.L.—	
(*a*) Mileage rates and special commodity rates (other than shown in Section "*b*") to be increased as follows:	
Where present rate is 7½c. or lower.	½c.
Over 7½c. but not exceeding 12½c.	1 c.
Over 12½c. but not exceeding 17½c.	1½c.
Over 17½c.	2 c.
L.C.L.	Fifth class.
(*b*) Rates from Fort William "all rail" also "lake and rail" to Montreal and points West.	1c.
Rates, Bay, Lake and River ports, to Montreal.	1c.
Rates from Fort William and Bay Ports to points east of Montreal will be based on established arbitraries. (For proposed arbitraries to Maritime Provinces see Item 1-D.)	

NOTE.—Grain from Bay, Lake and River Ports to be billed to milling and other points at local grain rates (subject to a maximum of 11c. to points in direct run from elevator port to Montreal), and on proof of reshipment of product, inward rate to be reduced to milling mileage scale.

Rates from Ontario points to points east of Levis and Megantic to be advanced 1c. plus the difference in the present and proposed arbitraries as shown in Item 1-D.

Grit, Poultry or Bird Gravel—	Proposed Advance.
Present basis, tenth class.	Proposed tenth class.
Hay—	Classification basis.
Leather—	Classification basis.
Leather, Scrap or Refuse—	
Present basis, tenth class.	Proposed tenth class.
Livestock, except Sheep and Hogs—	
No change proposed up to 45 miles.	
45 to 50 miles.	1c.
50 to 600 miles.	2c.

It is proposed to adjust the rates to Buffalo, N.Y., in line with the above with a maximum advance of 3c. per 100 lbs.

Lumber, Plastic—	Proposed Advance.
Ottawa to Montreal, present rate, 10c.	1c.
Ottawa to other points, present basis, seventh class.	Proposed seventh class.
Mica, Crude—	
Present basis, third class.	Proposed third class.

Paper, C.L.—The present rates on articles in Group "A" in the tariff are 75% of the regular fifth class rates, and in Group "B" 85% of fifth class. It is proposed to continue the same basis subject to the increases in class rates.

C.C.L.—Present basis, fourth class.	Proposed fourth class.
Paper (scrap or waste) and Strawboard (waste)—	
Specific commodity rates.	Present mileage scale.
Rice and Rice Flour—	
L.C.L.—Present basis, fourth class.	Proposed fourth class.
Rocmac Solution—	
Present basis, seventh class.	Proposed seventh class.
Sand and Gravel—	
Between all points in Ontario.	5c. per ton.
Sewer Pipe—	
Where present rate is 7½c. or lower.	1 c.
Where present rate is over 7½c.	1½c.
Present C.L. minimum weight on large pipe, 24,000 lbs.	To 30,000 lbs.
Silo Staves—	
Present basis, tenth class.	Proposed tenth class.
Silver Ore—	
Present basis, fourth, fifth, seventh and tenth class.	Proposed fourth, fifth, seventh and tenth class.

Starch and Glucose—	
Present basis, 75% of fifth class rates, plus authorized arbitraries.	75% of proposed fifth class rates plus authorized arbitraries.
Stone—Crushed (except stone for fluxing) and stone screenings, between all points in Ontario.	5c. per ton.
Stoves, Furnaces and Stove and Furnace Parts—Proportional Rates—	
Present basis, 90% of third class.	90% of proposed third class.
Stove Brick or Lining—	
Present basis, fourth class, L.C.L., and seventh class, C.L.	Proposed fourth class, L.C.L., and seventh class, C.L.
Sugar, Syrup and Molasses, Carloads—	
From Halifax, Dartmouth, St. John, Montreal, Berlin and Wallaceburg.	2c. per 100 lbs. subject to fifth class rates as a maximum.
Talc, Ground—	
Present basis, tenth class.	Proposed tenth class.
Vegetables—	
All vegetables except sugar beets and potatoes.	Classification basis.
Vegetables, in brine—	
Present basis, third class, L.C.L., and seventh class, C.L.	Proposed third class, L.C.L., and seventh class, C.L.
Woodenware and Matches—	
Mixed C.L., minimum weight 20,000 lbs.	Classification basis.
Fish, Fresh or Frozen, C.L.—	
From Maritime Province points to points in Ontario and Quebec, present basis, fifth class.	Proposed fifth class.
Fish, Pickled or Salted—	
From Maritime Province points.	Same relative advance as on fresh fish.
Paper, C.L.—	
To points in Maritime Provinces.	
From Ottawa, present basis, fifth class.	Proposed fifth class.
From Montreal and points taking Montreal rates, present basis, fifth class.	Proposed fifth class.
From points east of Montreal, present basis, arbitraries under the present Ottawa rate.	Same arbitraries under proposed Ottawa rate.
Rates on paper, other than mentioned on page 6.	Proposed relative advance.

Advances are also proposed in specific commodity rates of an individual character, and members should communicate with the Department to find how they are affected.

INSVRANCE

FROM the point of view of fire losses, the year 1915 has made an excellent beginning. According to the *Monetary Times'* estimate, the damage by fire throughout Canada during the month of January amounted to $1,249,886. This is the most favorable January Canada has had for a considerable number of years. During the corresponding month in 1914 the losses amounted to $2,796,312, and in 1913 to $3,913,385. If every property owner will do his share and exercise the greatest care possible or see that every precaution is taken to avoid fire loss during 1915, this large annual wastage will be reduced. Make it your duty during this eventful year.

Fireproofing Wood.

Interesting tests have been carried out in England in connection with the fireproofing or partial fireproofing of wood. The process consists in submitting wood, while enclosed in a large iron cylinder to a course of steaming, vacuum and pressure, whereby the sap-water, air and moisture in the wood are removed and replaced by a chemical solution. The wood is subsequently placed in specially constructed dry kilns, where the water of the solution is evaporated, leaving the chemicals in minute crystal form embedded throughout the fibres of the wood. When heat is applied, these crystals expand to many times their original size and form a glassy coating to the wood, excluding the oxygen of the air without which combustion is impossible. After a time the heat causes these crystals to collapse, but immediately further crystals in the interior of the wood expand and the process of excluding oxygen continues, with the result only of the charring of the wood at the point of contact with the source of heat applied. The British Fire Prevention Committee submitted the treated wood to a fairly severe test. The two-inch doors of impregnated deal were subjected on one side to heat rising to 1,650 degrees Fahrenheit for a period of sixty minutes. After the test the doors were practically intact, although charred to a depth of three-quarters of an inch, while thermometers placed fourteen inches from the doors on the side away from the source of heat had not registered any appreciable rise in temperature.

The Bases of Insurance Rates.

The general public think that fire insurance rates are too high, and that the expense of conducting the business is too great. It is encouraging to note that people are taking an interest in the subject, and are coming to understand that any increase in expenses, fire losses, taxes, etc., must fall upon the assured. As they come to a fuller realization of this fact they will make greater efforts to reduce these items of expenditure, thus securing corresponding reduction in cost of insurance.

There is another reason for such interest. Property destroyed by fire is a dead loss to the public, no matter if it is insured. The indemnity is collected from many persons insured in the company and given to the person suffering the loss. Hence there is no such thing as a loss being covered by insurance. It should be said that the loss is distributed over a large number of people instead of being borne by one person; but it is a loss, just the same.

This is forcibly illustrated by the terrible fire which recently destroyed the large manufacturing plant of Thomas A. Edison, the great inventor and manufacturer. Not only was there a heavy financial loss, but the loss to science and art and commerce is beyond computation. Even if the entire financial value of the plant could have been distributed among all the policyholders, the ultimate loss could not possibly be covered.

This, and every other fire, is an object lesson on the need of fire prevention not only by proper construction, but by eliminating the danger from exposing buildings. It is these large conflagrations that make violent increase in the fire waste, already enormously large from innumerable smaller fires. Until the cause of the Edison fire and its spread among the buildings constituting the plant has been determined, we

do not know whether this loss could have been prevented. Most of our fires can, and should, be prevented, and this great drain on our resources thereby checked.—*Willard Done.*

Mutual and State Insurance.

Mr. John T. Stone, President of the Maryland Casualty Company, in his Annual Review of 1914, expresses some interesting opinions regarding mutual and state insurance. He says: "Let it be borne in mind that every purchaser of an insurance policy becomes by that action a possible creditor. This is true whether the policy be issued by a stock company, a mutual association or a State fund. But when issued by either of the two carriers last named, the purchaser finds himself in the triple relation of debtor as to premium, creditor as to losses, and partner in the business. He is, therefore, literally endeavoring to accomplish the impossible feat of juggling these three financial balls and keeping them forever from yielding to the law of gravity. He is endeavoring to do this in a business in which he is untrained and inexperienced but which demands a high degree of technical knowledge and skill. He is risking not only his own premium payments, but is also undertaking to pay a share of the losses of the other members. He is both buyer and seller in the same transaction—a financial negation. He calls this fallacy insurance. Of course, it is nothing of the sort. Insurance means paying a certain fixed sum by the person insured to another who agrees, in consideration thereof, to reimburse the insured for any loss of the kind insured against, up to a much larger sum than the premium, and to collect no more premium than is set forth in the policy, no matter how great the loss. This is a clearly defined and finished transaction, in which there is no confusion of relationships and no door of uncertain liability left open. A certain thing is purchased at a certain price, and delivery is equally certain without further contingencies, if the insurance company continues solvent."

"Now, why does anyone attempt to effect that contradiction in terms, self-insurance, or mutual insurance, or State fund insurance, none of which is, in fact, insurance at all? Simply because he fancies he can thereby do what the stock companies are charged with doing; that is, make money by the transaction, or save money, which is, of course, the same thing. Would it not be much more in keeping with established principles of proven soundness, if he wishes to go into the insurance business, to buy stock in a well-managed and successful stock company?"

TARIFF

By J. R. K. BRISTOL

THE Minister of Finance in his Budget speech of the 11th inst., announced an emergency war tax, applicable on and after the 12th inst., of 5 per cent. under the British Preferential Tariff and 7½ per cent. under the Intermediate and General Tariffs, on both free and dutiable goods.

It was provided, however, that the following goods should be exempt from such emergency war taxes:

a Fish and other products of the fisheries of Newfoundland.

b Fish bought by fishermen in Canadian fishing vessels.

c Goods enumerated in Schedule "C" of the French Treaty. (These are canned vegetables, sardines, still and sparkling wines, certain books, medicinal preparations, olive oil, certain embroideries, silk fabrics, ribbons and manufactures of silk. By the terms of the French Treaty Parliament cannot alter the rates under Schedule "C" without denouncing the Treaty.)

d Goods imported to be used in the manufacture of mowing machines, harvesters, self-binding or without binders, binding attachments, reapers, and complete parts thereof, under regulations by the Minister of Customs;

e Goods imported to be used in the manufacture of binder twine for harvest binders, under regulations by the Minister of Customs;

f Articles imported to be used in the manufacture of goods enumerated in Tariff Item 682 in Schedule "A," under regulations by the Minister of Customs;

g Anthracite coal and anthracite coal dust;

h Bacteriological products or serum for subcutaneous injection;

i Vaccine and ivory vaccine points;

j Pressed felt, elastic webbing and hollow blocks of wood imported to be used in the manufacture of artificial limbs;

k Steel imported to be used in manufacturing rough unfinished parts of rifles, when such parts are to be used in rifles to be made for the Government of Canada;

l Fabrics of which silk is the component material of chief value imported to be used in the manufacture of neckties;

m Goods enumerated in the following tariff items, viz.:

Tariff Item.		British Preferential.	Intermediate Tariff.	General Tariff.
1	Horses, cattle, sheep, goats, asses, swine and dogs, for the improvement of stock, under regulations prescribed by the Governor-in-Council	free	free	free
2	Domestic fowls, pure-bred, for the improvement of stock, homing or messenger pigeons, and pheasants and quails	free	free	free
3	Bees	free	free	free
19	Cocoa shells and nibs	7½%	10%	10%
20	Cocoa paste or "liquor" and chocolate paste or "liquor" not sweetened, in blocks or cakes, per pound	3½c.	4c.	4c.
20a	Butter produced from the cocoa bean, per pound	1½c.	2c.	2c.
21	Cocoa paste or "liquor" and chocolate paste or "liquor" sweetened, in blocks or cakes not less than two pounds in weight, per pound	3½c.	4c.	4c.
22	Preparations of cocoa or chocolate in powder form	20%	25%	25%
23	Preparations of cocoa or chocolate, n.o.p. and confectionery coated with or containing chocolate, the weight of the wrappings and cartons to be included in the weight for duty, per pound	½c. and 22½%	½c. 35%	½c. 35%
28a	Tea imported direct from the country of growth and production, and tea purchased in bond in the United Kingdom	free	free	free
29a	Tea, n.o.p.	10%	10%	10%
39b	Arrowroot, per pound	½c.	1c.	1c.

40	Salt for the use of the sea or gulf fisheries	free	free	free
55	Indian corn, not for purposes of distillation and under regulations prescribed by the Minister of Customs, per bushel	free	free	free
60	Wheat, per bushel	8c.	10c.	12c.
61	Wheat flour, per barrel	40c.	50c.	60c.
66	Biscuits, sweetened	17½%	25%	27½%
77a	Cocoa beans, not roasted, crushed or ground, per 100 pounds	free	75c.	75c.
101a	Limes	free	10%	10%
118a	Squid	free	free	free
129	Oysters, seed and breeding, imported for the purpose of being planted in Canadian waters	free	free	free
132	Live fish and fish eggs, for propagating purposes	free	free	free
134	All sugar above number sixteen Dutch standard in color, and all refined sugars of whatever kinds, grades or standards, testing not more than eighty-eight degrees by the polariscope, per 100 pounds	72c.	93c.	93c.
	And for each additional degrees over eighty-eight degrees, per 100 pounds	1c.	1⅓c.	1⅓c.
	Provided that fractions of five-tenths of a degree or less shall not be subject to duty, and that fractions of more than five-tenths shall be dutiable as a degree.			
	Provided that refined sugar shall be entitled to entry under the British Preferential Tariff upon evidence satisfactory to the Minister of Customs that such refined sugar has been manufactured wholly from raw sugar produced in the British colonies and possessions, and not otherwise.			
135	Sugar, n.o.p. not above number sixteen Dutch standard color, sugar drainings, pumpings drained in transit, melado or concentrated melado, tank bottoms, sugar concrete, and molasses testing over fifty-six degrees and not more than seventy-five degrees by the polariscope, per 100 pounds	25c.	31¼c.	31¼c.
	And for each additional degree over seventy-five degrees, per 100 pounds	¾c.	1¼c.	1¼c.
	Provided that fraction of five-tenths of a degree or less shall not be subject to duty, and that fractions of more than five-tenths shall be dutiable as a degree.			
	Provided that all raw sugar, including sugar specified in this item, the produce of any British colony or possession, shall be entitled to entry under the British Preferential Tariff, when imported direct into Canada from any British country.			
	Provided that sugar imported under this item shall not be subject to special duty.			
142	Tobacco, unmanufactured, for excise purposes under conditions of the Inland Revenue Act	free	free	free
143	Cigars and cigarettes, the weight of cigars to include bands and ribbons, and the weight of cigarettes to include the paper covering, per pound	$3 00 and 25%	$3 00 25%	$3 00 25%
144	Cut tobacco, per pound	55c.	55c.	55c.
145	Manufactured tobacco, n.o.p. and snuff, per pound	50c.	50c.	50c.
153	Lime juice, raw and concentrated, not refined, per gallon	free	5c.	5c.
164	Wines of all kinds, except sparkling wines, containing not more than 40 per cent. of proof spirit, whether imported in wood or in bottles (six quart bottles or twelve pint bottles to be held to contain a gallon), when the produce or manufacture of any British colony or territory in the South African Customs Union Convention, per gallon	25c.	25c.	25c.
169m	Books, viz.: Novels or works of fiction, or literature of a similar character, unbound or paper bound or in sheets, but not to include Christmas annuals, or publications commonly known as juvenile and toy books	15%	22½%	25%
171	Books, printed, periodicals and pamphlets, or parts thereof, n.o.p., not to include blank account books, copy books, or books to be written or drawn upon	5%	10%	10%
172	Books, viz.: Books on the application of science to industries of all kinds, including books on agriculture, horticulture, forestry, fish and fishing, mining, metallurgy, architecture, electric and other engineering, carpentry, ship-building, mechanism, dyeing, bleaching, tanning, weaving and other mechanic arts, and similar industrial books; also including books printed in any language other than the English and French languages, or in any two languages not being English or French, or in any three or more languages; and bibles, prayer-books, psalm and hymn-books, religious tracts and Sunday-school lesson pictures	free	free	free
173	Books, embossed, and grooved cards for the blind; and books for the instruction of the deaf and dumb and blind; maps and charts for the use of schools for the blind	free	free	free
174	Books printed by any government or by any association for the promotion of science or letters and official annual reports of religious or benevolent associations and issued in the course of proceedings of the said associations to their members and not for the purpose of sale or trade	free	free	free
175	Books not printed or reprinted in Canada, which are included and used as text-books in the curriculum of any university, college or school in Canada; books specially imported for the *bona fide* use of incorporated mechanics' institutes, public libraries, libraries of universities, colleges and schools, or for the library of any incorporated medical, law, literary, scientific or art association or society, and being the property of the organized authorities of such library, and not in any case the property of individuals—the whole under regulations prescribed by the Minister of Customs—provided that importers of books who have sold the same for the purpose mentioned in this item, shall upon proof			

	of sale and delivery for such purpose, be entitled to a refund of any duty paid thereon.....	free	free	free
176	Books bound or unbound, which have been printed and manufactured more than twelve years.	free	free	free
178a	Provided that on the goods specified in item 178 and imported by mail on and after first day of July, 1914, duties may be paid by Customs Revenue stamps, under regulations by the Minister of Customs, at the rates specified in said item, except that on each separate package weighing not more than one ounce the duty shall be, each.	1c.	1c.	1c.
180a	Photographs sent to the press for use only as news pictures, under regulations by the Minister of Customs	free	free	.free
184	Newspapers, and quarterly, monthly and semi-monthly magazines, and weekly literary papers, unbound; and tailors', milliners' and mantle-makers' fashion plates.....	free	free	free
196	News printing paper and all printing paper, in sheets and rolls, valued at not more than two and one-quarter cents per pound.....	10%	12½%	15%
201	Matrix paper, not being tissue paper, adapted for use in printing.....	free	free	free
209b	Nicotine sulphate	free	free	free
329	Ores of metals, n.o.p.	free	free	free
329a	Iron ore ..... per ton	6c.	8c.	8c.
348a	Works of art, in bronze, cast from models made in Canada and designed by sculptors domiciled therein, under regulations by the Minister of Customs	free	free	free
352a	Bells, when imported for use of churches only	free	free	free
359	Gold and silver, in ingots, blocks, bars, drops, sheets or plates, unmanufactured; gold and silver sweepings; and bullion fringe or gold fringe	free	free	free
360	British and Canadian coin and foreign gold coin	free	free	free
369	Chronometers and compasses for ships	free	free	free
373	Scrap iron and scrap steel, old and fit only to be re-manufactured, being part of or recovered from any vessel wrecked in waters subject to the jurisdiction of Canada	free	free	free
441	Typecasting and typesetting machines and parts thereof, adapted for use in printing offices	free	free	free
443	Newspaper printing presses of not less value by retail than fifteen hundred dollars each of a class or kind not made in Canada	free	free	free
445	Mowing machines, harvesters, self-binding or without binders, binding attachments, reapers and complete parts thereof, not including shafting	12½%	17½%	17½%
445a	Malleable iron castings, when imported by manufacturers for use exclusively in their own factories in the manufacture of mowing machines, harvesters, binding attachments and reapers	15%	17½%	17½%
446a	Traction ditching machines (not being ploughs) adapted for tile drainage on farms, valued by retail at not more than three thousand dollars each, and complete parts thereof for repairs	free	free	free
464	The following articles and materials, under regulations prescribed by the Minister of customs, viz.:			
	(a) All tools and machinery not manufactured in Canada up to the required standard, necessary for any factory to be established in Canada for the manufacture of rifles for the Government of Canada	free	free	free
	(b) All materials or parts in the rough, unfinished, and screws, nuts, bands and springs, to be used in rifles to be manufactured at any such factory for the Government of Canada	free	free	free
466	Surgical and dental instruments of metal; surgical needles; X-ray apparatus and parts thereof; surgical operating tables for use in hospitals; and microscopes valued at not less than $50 each by retail	free	free	free
466a	Glassware and other scientific apparatus for laboratory work in public hospitals, also apparatus for sterilizing purposes, not including washing or laundry machines; all articles in this item when imported in good faith for the use and by order of any public hospital	free	free	free
470	Iron or steel masts, or parts thereof, and iron or steel beams, angles, sheets, plates, knees and cable chain, for wooden, iron, steel, or composite ships and vessels; and iron, steel for brass manufactures which at the time of their importation are of a class or kind not manufactured in Canada, when imported for use in the construction or equipment of ships or vessels, under regulations prescribed by the Minister of Customs	free	free	free
483	Stereotypes, electrotypes and celluloids of newspaper columns in any language other than French and English, and of books and bases and matrices and copper shells for the same, whether composed wholly or in part of metal or celluloid	free	free	free
544	Binder twine or twine for harvest binders	free	free	free
544a	Articles which enter into the cost of the manufacture of binder twine or twine for harvest binders, when imported for such use exclusively by manufacturers who manufacture such twine only	free	free	free
576	Silk, raw or as reeled from the cocoon, not being doubled, twisted or advanced in manufacture in any way; silk cocoons and silk waste	free	free	free
595	Locomotives and railway passenger, baggage and freight cars, being the property or under the control of railway companies in the United States, running upon any line or road crossing the frontier, so long as Canadian locomotives and cars are admitted free under similar circumstances into the United States, under regulations prescribed by the Minister of Customs	free	free	free
596	Materials to be used in Canada for the construction of bridges and			

	tunnels crossing the boundary between the United States and Canada, when similar materials are admitted free under similar circumstances into the United States, under regulations prescribed by the Minister of Customs	free	free	free
676	Metallic tubes, glass caps, shells, containers and capillary tubes, rubber bulbs, boxes and corks, when imported by manufacturers of vaccine points for use exclusively in the manufacture of such articles in their own factories	free	free	free
682	Fish hooks, for deep-sea or lake fishing, not smaller in size than number 2—0; bank, cod, pollack and mackerel fish lines; and mackerel, herring, salmon, seal, seine, mullet, net and trawl twine in hanks or coil, barked or not— in variety of sizes and threads—including gilling thread in balls and head ropes for fishing nets; manilla rope not exceeding one and one-half inches in circumference, for holding traps in the lobster fishery; barked marline, and net norsels of cotton, hemp of flax; and fishing nets or seines, when used exclusively for the fisheries not to include hooks, lines or nets commonly used for sportsmen's purposes	free	free	free
688	Artificial limbs, and parts thereof; artificial teeth, not mounted ..	free	free	free
689	Lifeboats and life-saving apparatus, specially imported by societies to encourage the saving of human life	free	free	free
689a	Miners' rescue appliances, designed for emergency use in mines where artificial breathing is necessary in the presence of of poisonous gases and automatic resuscitation apparatus for artificial breathing, to aid in the saving of human life	free	free	free
690	Clothing and books, donations of, for charitable purposes, and photographs, not exceeding three, sent by friends and not for the purpose of sale	free	free	free
690a	Casual donations from abroad sent by friends, and not being advertising matter, tobacco, articles containing spirits or merchandise for sale—when the duty otherwise payable thereon does not exceed fifty cents in any one case, under regulations by the Minister of Customs ..	free	free	free
691	Communion sets, of metal, glass or wood	free	free	free
692.	Coins, cabinets of; collections of medals and collections of postage stamps; medals of gold, silver or copper, and other metallic articles actually bestowed as trophies or prizes and received and accepted as honorary distinctions, and cups or other metallic prizes (not usual merchantable commodities), won in bona fide competitions	free	free	free
692a	Articles presented from abroad in recognition of the saving of human life, under regulations by the Minister of Customs ..	free	free	free
693	Collections of antiquities, when imported by or for public museums, public libraries, universities, colleges or schools, and which are to be placed in such institutions	free	free	free
694	Models of inventions and of other improvements in the arts—but no articles shall be deemed a model which can be fitted for use	free	free	free
695a	Paintings in oil or water colors and pastels, valued at not less than twenty dollars each—paintings and sculptures by artists domiciled in Canada, but residing temporarily abroad for purposes of study, under regulations by the Minister of Customs	free	free	free
696	Philosophical and scientific apparatus, utensils, instruments, and preparations, including boxes and bottles containing the same; maps, photographic reproductions, casts as models, etchings, lithographic prints or charts. All articles in this item, when specially imported in good faith for the use and by order of any society or institution incorporated or established solely for religious, philosophical, educational, scientific or literary purposes, or for the encouragement of the fine arts, or for the use or by order of any college, academy, school, or seminary of learning in Canada, and not for sale, under regulations prescribed by the Minister of Customs	free	free	free
697	Globes, geographical, topographical and astronomical	free	free	free
698	Typewriters, type, tablets, with movable fixtures, and musical instruments, when imported by and for the use of schools for the blind, and being and remaining the sole property of the governing bodies of the said schools and not of private individuals	free	free	free
699	Botanical and entomological specimens; mineralogical specimens; skins of birds, and skins of animals not natives of Canada, for taxidermic purposes, not further manufactured than prepared for preservation; fish skins; anatomical preparations and skeletons or parts thereof; and specimens, models and wall diagrams for illustration of natural history for universities, schools and public museums	free	free	free
700	Animals and articles brought into Canada temporarily and for a period not exceeding three months, for the purpose of exhibition or of competition for prizes offered by any agricultural or other association	free	free	free
701	Menageries, horses, cattle, carriages and harness of, under regulations prescribed by the Minister of Customs	free	free	free
702	Carriages for travellers, and carriages laden with merchandise, not to include circus troupes or hawkers, under regulations prescribed by the Minister of Customs	free	free	free
703	Travellers' baggage, under regulations prescribed by the Minister of Customs	free	free	free
704	Apparel, wearing and other personal and household effects, not merchandise, of British subjects dying abroad, but domiciled in Canada, books, pictures, family			

	plate or furniture, personal effects and heirlooms left by bequest	free	free	free
705	Settlers' effects, viz.: Wearing apparel, books, usual and reasonable household furniture and other household effects; instruments, and tools of trade, occupation or employment, guns, musical instruments, domestic sewing machines, typewriters, bicycles, carts, wagons, and other highway vehicles, agricultural implements and live stock for the farm, not to include live stock or articles for sale, or for use as a contractor's outfit, nor vehicles or implements moved by mechanical power, nor machinery for use in any manufacturing establishment; all the foregoing if actually owned abroad by the settler for at least six months before his removal to Canada, and subject to regulations prescribed by the Minister of Customs	free	free	free
	Provided that any dutiable article entered as settlers' effects may not be so entered unless brought by the settler on his first arrival, and shall not be sold or otherwise disposed of without payment of duty until after twelve months' actual use in Canada.			
706	Articles for the personal or official use of Consuls General who are natives or citizens, of the country they represent and who are not engaged in any other business or profession	free	free	free
707	Articles for the use of the Governor-General	free	free	free
708	Arms, military stores, munitions of war and other articles the property of the Imperial government, and to remain the property of such government; articles consigned direct to officers and men of His Majesty's Imperial navy, for their own personal use or consumption, on board their own ships	free	free	free
709	Articles and other goods, the growth, produce or manufacture of Canada, returned to the exporter thereof after having been advanced in value or improved in condition by any process of manufacture or other means; also quick-silver flasks, and other metallic receptacles for holding liquids, and oyster pails, after having been once exported from Canada	free	free	free
	Provided that the said articles and goods are returned within five years from time of exportation, subject to regulations prescribed by the Minister of Customs;			
	Provided also, that any article or goods described in this paragraph, upon which an allowance of drawback has been made, shall not be admitted to entry except upon payment of duties equal to the drawback allowed;			
	Provided further that any of such goods or articles manufactured in bond or under Excise regulations in Canada and exported shall not be admitted to entry except upon payment of the Customs or Excise duties to which they would have been liable had they not been exported from Canada.			

THE FRENCH TREATY AND THE NEW TARIFF.

Goods Enumerated in Schedule "C" of the French Convention Act of 1908, are Exempt from the New Tariff Increases.

THE goods enumerated in Schedule "C" of the French Treaty Act are exempt from the tariff increases of 5 per cent. Preferential and 7½ per cent. Intermediate or General. The Government cannot advance the rates of duty on goods covered by Schedule "C" of the French Treaty without denouncing the French Treaty *in toto*. The goods listed in such schedule, in order to be entered at the rates of duty set out in the said schedule, must be conveyed without transhipment from a port of a territory enjoying the Preferential or French Treaty rates, in respect to the said products, into a sea or river port of Canada. The countries entitled to the low rates in Schedule "C" of the French Treaty are the United Kingdom, all British colonies and British possessions, the Argentine, Columbia, Venezuela, Denmark, Japan, Norway, Russia, Spain, Sweden, Switzerland and, of course, France.

It should be noted that the goods enumerated in Schedule "C" of the French Treaty may be imported from other foreign countries, including the United States (except Germany, Austria and Turkey) without the tariff increases of 5 and 7½ per cent. respectively, applying, even although such importations are dutiable under the General Tariff.

The goods enumerated in Schedule "C" of the French Treaty Act are as follows:

No. of the Canadian Tariff.	Products.	Duties.
Ex. 86	Vegetables, tomatoes excepted, including baked beans, in cans, or other air-tight packages, n.o.p., the weight of the cans or other packages to be included in the weight for duty, per pound.....	1c.
Ex. 120	Anchovies, sardines, sprats, and other fish, packed in oil or otherwise, in tin boxes, the weight of the tin box to be included in the weight for duty:	
	(*c*) When weighing over eight ounces, and not over twelve ounces each, per box	2c.
Ex. 163	Wines of the fresh grape of all kinds, not sparkling, imported in barrels or in bottles:	
	(*a*) Containing 20% or less of proof spirit*, per gal.	15c.
	(*b*) Containing more than 20%* and not more than 23% proof spirit**, per gal.	20c.
	(*c*) Containing more than 23% and not more than 26% of proof spirit, per gal.	25c.
	For each degree in excess of 26% of proof spirit until the strength reaches 40% of proof spirit	3c.

*Or 11 degrees 6 by centesimal alcoholometer.
**Or 13 degrees 3 by centesimal alcoholometer.

Provided that six quarts (3) bottles, or twelve pint (4) bottles, shall be held to contain a gallon for duty purposes under this item.

Ex. 165 Champagne and all other sparkling wines in bottles containing:

(*a*) Not more than a quart, but more than a pint (old wine measure), per dozen bottles $3.30

(*b*) Not more than a pint, but more than one half pint (old wine measure), per dozen bottles 1.65

(*c*) One half pint, or less, per dozen bottles..... ..... .82

(*d*) Over one quart (old wine measure), per gallon 1.50

Ex. 169 Books, viz.: Novels or works of fiction, or literature of a similar character, unbound or paper bound or in sheets, in the French language, but not to include Christmas annuals, or publications commonly known as juvenile and toy books 15%

Ex. 171 Books, printed, periodicals and pamphlets, or parts thereof, in the French language, n.o.p.; not to include blank account books, copy books, or books to be written or drawn upon 5%

Ex. 220 All medicinal, chemical and pharmaceutical preparations compounded of more than one substance, including patent and proprietary preparations, tinctures, pills, powders, troches, lozenges, syrups, cordials, bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters, essences and oils, n.o.p.

Ex (*b*) All other than dry, and not containing alcohol 25%

(3) Equal to .946 of a litre.

(4) Equal to .473 of a litre.

Provided that drugs, pill mass and preparations, not including pills or medicinal plasters, recognized by the British or United States Pharmacopoeia, or the French Codex as official, shall not be held to be covered by this item.

262 Olive oil, n.o.p. 15%

Ex. 575 Embroideries, n.o.p.; lace, n.o.p.; collars or collarettes in lace and all manufactures of lace; nettings of cotton, linen, silk or other material, n.o.p. 27½%

Ex. 581 Velvets of pure silks and silk fabrics..... 20%

582 Ribbons of all kinds, and materials..... 25%

583 Manufactures of silk or of which silk is the component part of chief value, n.o.p..... 32½%

NOTE 1.—The term "Ex" in the case of the number of an item means a part of the item to which the number refers.

NOTE 2.—The numbers of the tariff items have reference to the present Canadian tariff.

Exporters Not Affected by New Tariff.

In regard to the tariff increases of 5 per cent. under the British Preferential Tariff and 7½ per cent. under the General Tariff for emergency war revenue purposes, we have had enquiries as to whether drawback is obtainable of 99 per cent. of such duties when paid on imported materials used in manufacturing goods for export. The answer to these enquiries is, yes! The law and regulations enable manufacturers to obtain drawback of 99 per cent. of all duties paid on imported materials used in manufacturing goods for export. These are necessary provisions in the law to enable Canadian manufacturers to compete in export markets with manufacturers of other countries—because all manufacturing countries, including the United Kingdom, allow drawback of duties paid on imported materials used in manufacturing for export.

SPECIAL REVENUE TAXES

Imposed on Banks, Loan Companies, Telegraph Companies, Railways, Steamship Lines, Documents and Wines

Financial Taxes.

Upon all banks to which the Bank Act applies a yearly sum equal to one per cent. upon the note circulation to be computed and paid quarterly.

Upon every trust and loan company incorporated under any legislative authority and carrying on business in Canada a yearly sum equal to one per cent. of its gross income derived in Canada payable quarterly.

Upon every insurance corporation, society, association, firm or partnership carrying on the business of insurance, other than life, fraternal, benefit and marine insurance, a sum of one per cent. upon all net premiums received by it in Canada. Payments to be made quarterly.

The provisions of the Bill will apply to business of the respective banks, trust and loan and insurance companies transacted after January 1st, 1915, and the first receipts therefrom will reach Consolidated Revenue Fund about May 1st.

Taxes on Travel and Telegraph.

Upon every cable and telegraph company using telegraphic cables or wires within the jurisdiction of Canada a sum equal to one cent upon each despatch or message originating in Canada for which a charge of fifteen cents or more is imposed. Returns to be made quarterly. The Company is authorized to charge the additional toll and collect the same from the person sending the message.

Upon every purchaser of a railway or steamboat ticket in Canada for any point in Canada, Newfoundland, the West Indian Colonies or the United States the sum of five cents in respect of a ticket costing over one dollar and not more than five dollars, and five cents for each additional five dollars or fractional part of five dollars which the ticket costs.

Upon every purchaser of a berth in a sleeping car or seat in a parlor car the sum of ten cents in respect of each berth bought and five cents in respect of each seat bought in Canada.

The Railway or Steamboat Company or person selling the railway, sleeping car and parlor car tickets referred to are required to collect the taxes imposed and transmit to the Government.

Upon every person, firm or company carrying passengers by vessel to ports or places other than ports or places in Canada, Newfoundland, the British West Indian Colonies and the United States, in respect of each passenger the sum of one dollar if the amount chargeable for the passage exceeds ten dollars, the sum of three dollars if such amount exceeds thirty dollars, and the sum of five dollars if the amount exceeds sixty dollars. The Company is authorized to collect the tax from the passenger and is required to account therefor to the Government.

Stamp Taxes.

Upon all cheques, receipts to banks by depositors and upon bills of exchange passing through a bank a stamp tax of the value of two cents.

Upon all express and post office money orders a stamp tax of the value of two cents and upon postal notes a stamp tax of one cent.

Upon every letter and postal card posted in Canada a war stamp tax of one cent.

Upon every bill of lading a stamp tax of two cents.

Upon proprietary or patent medicines and perfumery sold in Canada, the retail price for each bottle or package of which is ten cents or less, one cent, and in addition for each ten cents of retail price, one cent.

Upon wine, non-sparkling, sold in Canada, for every bottle or package containing one quart or less, five cents, and for each additional quart, five cents.

Upon champagne and sparkling wine, sold in Canada, every bottle containing one pint or less, twenty-five cents, and for each additional pint twenty-five cents.

Note.—Hon. Mr. White, Minister of Finance, estimates that $8,000,000 will be raised by these special taxes.

LEGISLATION

By F. W. WEGENAST

THE most important legislative matter of the month is the decision of the Supreme Court of Canada in the Bonanza Creek Mining Company case. This case embodied in concrete form the issue raised in the first part of the Companies Reference, namely, as to the right of a provincially incorporated company to carry on business outside the incorporating province. The two cases, the Bonanza Creek Mining Company case and the John Deere Plow Company case cover in concrete form most of the ground in the Companies Reference.

Incorporated under Provincial Charter.

The Bonanza Creek Mining Company was incorporated under a charter from the Province of Ontario. It had obtained from the Legislature of the Yukon Territory a license, similar to the licenses issued by the different provinces, to enable it to carry on mining operations in the Yukon Territory. In a contest with the company over a mining claim, the Dominion Government set up the plea that the company, being incorporated by the Province of Ontario, could not do business outside of Ontario. The Supreme Court, after a full discussion of the issue, not only from the standpoint of mining companies, but of companies engaged in trade and commerce, has held that the company was inherently incapable of carrying on business beyond the boundaries of the Province of Ontario.

Dominion Charter Necessary.

The importance of the decision cannot be exaggerated. It means, if it means anything, that companies carrying on business in more than one province must have a Dominion charter. It means also that all business heretofore carried on by provincial companies outside the boundaries of their incorporating province was *ultra vires* and void, or at least voidable, so far as the companies are concerned. It means, further, that the invalidity of extra-provincial transactions cannot be cured by extra-provincial licenses from the other provinces.

The decision marks another, and a very long step, towards a solution of the problem of company organization and control in Canada. It is possible that the case will go on appeal to the Privy Council, but there is no reason to expect a reversal of the decision of the Supreme Court. The decision in this case, together with that of the Privy Council in the John Deere Plow Company case, will inevitably result in a general abandonment of provincial charters by all companies engaged in anything like interprovincial business.

The whole question is of such serious import to the provinces that there is reason to expect that every effort will be made by the provinces on the hearing of the general Companies Reference to secure some modification of the principles laid down by the Privy Council in the John Deere Plow Company case and the Supreme Court in the Bonanza Creek case. The Canadian Manufacturers Association was a party on the hearing of the Reference before the Supreme Court, and a case is being filed on behalf of the Association in the Privy Council.

Bearing in the Past.

As to the invalidity of the past transactions of provincial companies, this is a matter so serious that it will in all likelihood have to be dealt with by remedial legislation of the Imperial Parliament.

The plea of *ultra vires* is more difficult to apply in a great many cases that might be imagined. It would be difficult, for instance, for a customer in Winnipeg of an Ontario company to set up in an action for the price of goods which had been delivered to him that the company had not the corporate capacity to deliver the goods. On the other hand, it would be difficult for an Ontario company which had bought goods in Winnipeg to set up the plea of *ultra vires* as a defence to paying for them. It is difficult to estimate just how the doctrine of *ultra vires* would apply in cases of this kind. But there is a large field of executary contracts where the plea would readily lie. For instance, there would appear to be nothing to prevent a Manitoba customer of an Ontario company from cancelling orders on the ground that the company was incapable of filling them, and conversely a provincial company should, on the same ground, be in a position to decline to fulfil any contract beyond the boundaries of its incorporating province.

PORT ARTHUR PATRIOTIC.

Goods made in Canada will be given preference by the British Empire Industrial League, and goods made in Great Britain the next choice, according to an official communication received by Secretary Goodier, of the Port Arthur Board of Trade, from the headquarters of the league in London, England.

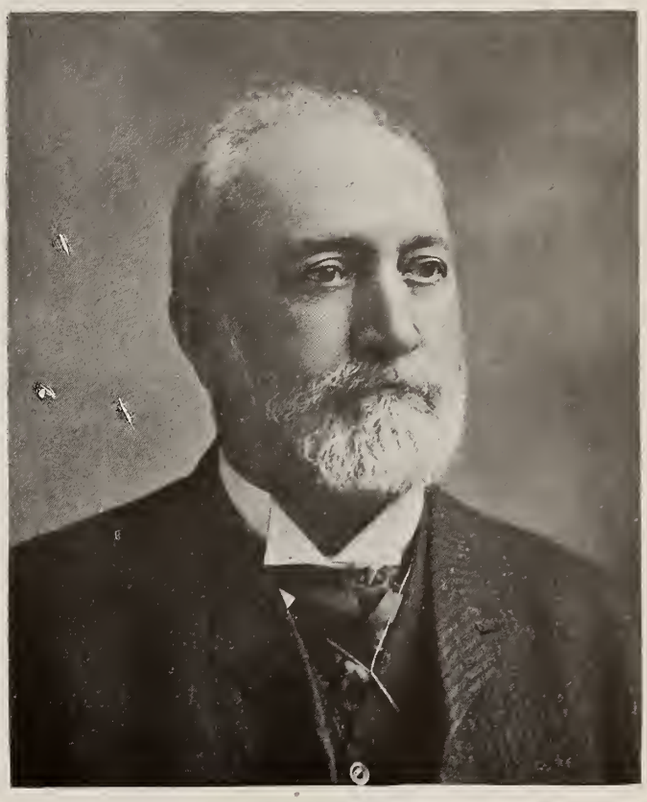
A PIONEER CANADIAN MANUFACTURER

MR. SAMUEL MAY was the first to make a billiard table in Canada and first to establish the manufacture of billiard tables, cues and ivory balls in British America. Mr. May has been a resident of Toronto for fifty-five years. In the year 1860 he commenced business here acting as sales agent for Michael Phelan of New York, who at that time was the greatest billiard player and the most popular billiard table maker in the United States. After two years' experience in this line, Mr. May was impressed with the necessity of a factory in Canada for the manufacture of tables, balls, cues, etc., and forthwith decided to start such an industry in Toronto, and early in 1864 commenced to ship tables from the little factory which was then situated on King St. West, adjoining the "Revere House" where the "Iroquois" now stands, but shortly afterwards the industry was removed to new and more commodious premises in the shape of an up to date factory built expressly for the business on Adelaide St. West, Toronto. From that date on, the billiard business grew steadily.

In 1876 Mr. May exhibited at the Great Centennial Exhibition, held in Philadelphia. (John Creahan, *Sporting Life*, Phila., recently said, "Samuel May is probably the oldest living billiard table manufacturer in the western world to-day, if not in the entire world. I first met him in New York in 1856, and remember well his exhibition in the Centennial in '76. His table there was magnificently constructed and hand carved.")

After the Philadelphia Exhibition closed, the Canadian exhibit, at the request of the Canadian Government, was sent to Australia for the World's Exhibition held there in 1877. The exhibit was sold in its entirety and was awarded a bronze medal. In 1886 Mr. May exhibited at the Indian & Colonial Exhibition held in London, England, and for which he received the bronze medal, and sold all tables, balls, cues, etc., to an English admirer of the Canadian product. The next foreign exhibit was made in Paris in 1900, where Mr. May exhibited a full size standard English billiard table and cabinet, all beautifully carved in Canadian oak and representing Canadian sports and pastimes. Here Mr. May received the silver medal and diploma which was the highest honor that could be given a foreign exhibitor. At home the "May Tables" are well and favorably known throughout the Dominion from Sydney Mines on the east coast to the Klondyke on the far north-western coast, and have received medals of merits from all industrial exhibitions where they have been exhibited from time to time at all leading centres throughout the Dominion. Mr. May has sent thousands of tables to the north-west provinces. The first to be sent to Manitoba was in the early seventies. At that time the freight on tables to the West cost more than the tables themselves, as they had to be teamed from St. Paul to Winnipeg. This of course handicapped sales in that territory until the advent of the C.P.R., after which there was a great boom in tables all through the West as railroad work extended, and Mr. May's factory was kept busy working night and day for quite an extended period on this new western trade. Also in the more recent days the "May Table" has figured prominently in most of the leading clubs, hotels, prominent billiard rooms and private residences throughout the Dominion, and through all the years it could always be said that a "Samuel May Billiard Table" enjoyed the reputation of being sound and good to the core.

As Mr. May now recalls the early days, there were numerous difficulties in the way of establishing a billiard table industry in Canada, because in those days there were not many billiard players in the country. In 1860 there were only two public tables in Toronto, so that in addition to making the tables and accessories, a demand had to be created for the goods, and the people taught how to play billiards. This was done by giving tournaments for Canadian players, also by bringing on English, French and American experts to give public exhibitions in billiard playing, all of which was done persistently and consistently, notwithstanding the fact that such exhibitions rarely, if ever, paid expenses, but Mr. May had at heart the furthering of an industry, and which, as we all so well know, was ultimately accomplished.



MR. SAMUEL MAY.

The billiard manufacturing premises of Samuel May & Company at the present time consists of the extensive premises at 102 and 104 Adelaide Street West, being a five-storey building, which is occupied as general offices and showrooms, cue-making, ball-turning and general repair works. An entire floor fitted up with special lathes and motors is devoted to ball-turning. Here all ivory and composition balls are turned, also great quantities of ten-pins and lignum-vitae balls for bowling, alleys, bowling green balls, etc. In addition to the Adelaide Street premises a steel and concrete, fireproof, four-storey modern factory building adjoins the pulley factory at Pelham and Osler Avenues, which is used exclusively for the manufacture of billiard tables and bowling alleys. This factory is fitted up with modern machinery and is electrically driven. Large lumber yards, dry kiln facilities and every modern method is here for the rapid production of large quantities of the company's output.

Mr. May has always been of an inventive turn of mind. He has taken out many patents covering improvements in billiard tables. His patent billiard table cushions have not only been made and sold throughout Canada, but have also enjoyed a large sale in the United States, Mr. May at one

time maintaining a New York branch. Mr. May always had a leaning to things mechanical, and in the year 1885, when on a visit to the Louisiana Exhibition, held at New Orleans, he there saw the first Dodge wood split pulley exhibited, and after more or less conversation with Mr. Dodge, the patentee, Mr. May, in due course, bought the Canadian patent covering the Dodge pulley from Mr. Wallace H. Dodge, and in the year 1886 he commenced the manufacture in Toronto of the celebrated Dodge wood split pulley. Mr. May also exhibited the Dodge pulley at the Indian and Colonial Exhibition, held at London in 1886. He was the first to introduce the wood split pulley into England, and his company has enjoyed a large trade with Britain and her colonies ever since. The demand for the wood pulley in Canada was so great that a large and separate works and separate company had to be organized and developed for the successful handling of this new branch of trade, until at the present day a site of some eight acres constitutes the plant of Dodge Manufacturing Company, the outcome of Mr. May's happy thought in concluding to introduce to the public of Canada this new pulley, which has since earned for itself and its makers a world-wide reputation. The various shops and departments over which Mr. May's interests preside occupy nearly 200,000 feet floor space, the products of which are shipped not only throughout the length and breadth of the Dominion but go to all parts of the British Empire, so that Mr. May can truthfully be referred to as one of Canada's real captains of industry and a pioneer Canadian manufacturer.

Mr. May is one of the oldest living members of the Canadian Manufacturers Association, the National Club, the Royal Canadian Yacht Club, the Granite Club and the Liederkranz. He is also a member of the Royal Canadian Institute. He is also a past first vice-president of the Canadian Manufacturers Association, holding that office during the years 1887 to 1889, inclusive. Mr. May is an enthusiastic Canadian. He was one of the first to own a motor boat on the Toronto Bay, and with native pride he christened her *The Beaver*. Mr. May has consistently turned down all offers of amalgamations, consolidations or absorbtions by foreign interests, and has steadfastly stood first and last a Canadian manufacturer.

VALUABLE BOOK FOR EXPORT SHIPPERS.

The eleventh (1915) edition of the "Exporters' Encyclopaedia," which has just been issued, is a handsome cloth-bound book of 1,150 pages, which shows every shipping route from the United States and Canada to foreign ports, as well as all the customs (consular) regulations and charges for all countries. The "Encyclopaedia" is, in fact, a complete export shipping guide and has become a standard authority among export shippers throughout the United States and Canada. A glance at the Table of Contents shows that practically every question that comes up in making an export shipment is thoroughly covered, as in addition to the shipping routes and regulations the book devotes considerable space to such matters of interest to export shippers as the following: Values of foreign coins, banks and bankers in foreign trade, cable rates, commerce, industries, etc., of each country; explanation of commercial terms, consignment of goods, Consuls (American and foreign), contraband of war, conversion tables of foreign coins, drawbacks on export shipments, foreign drafts, foreign postage rates and parcel post, foreign weights and measures (American equivalent), mail time to foreign cities, marine insurance, postal money order system (foreign), protection of trade marks abroad, selling American goods abroad.

The shipper needs only to know the country to which shipment is to be made—the "Index of Countries" in the "Encyclopaedia" tells him where to find the entire story for that country.

The information in the "Encyclopaedia" is supplemented by monthly "correction notes," which are included in the *Exporters' Review*, a 64-page magazine containing articles and items of interest to export shippers. The subscription price of the "Encyclopaedia," including the *Exporters' Review* for the calendar year, is $7.50. Published by the "Exporters' Encyclopædia Co.," 80 Broad Street, New York.

THE DEPENDENT.

The man who feels unneedful of his fellows round about
Has either got a swelled head, sour stomach or the gout,
His point of view is twisted and his vision far from keen,
For he owes most every man he sees and thousands more unseen.

Whence comes the wheat that makes his bread; who grinds it into flour?
Who built his covering overhead; not men so dwarfed and sour
As himself; else this old world would be a sorry place to live,
For then all men would strive to get when rather they should give.

He may think it doesn't matter where his purchases are made,
He may think that foreign products can put Canada's in the shade,
He may think he's independent and can buy where'er he will,
But his vain false pride is soon due for a most inglorious spill.

He will find the time soon coming when the fires of life are drawn,
And the gold and dross each in its place is put by men of brawn;
Then he'll suddenly awaken to the fact that life is sweet
Only when its fixed conditions every man's prepared to meet.

He will find it his experience when his attitude is known
To be helpful to his neighbors, that their gratitude is shown
By an honest disposition to make his concerns their own;
Showing how from allied interests something beautiful has grown.

Let us hope this erring brother will awaken ere too late,
And donate his contribution to the welfare of the State,
By enquiring of each purchase if the goods are "foreign-born,"
And when finding such to be the case, refusing them with scorn.

Let him learn the various products of the factories here at hand,
Fill his needs with what they offer, and then publish thro' the land
What *he* makes for city dwellers or for tillers of the soil,
And he'll find a nearer market for the products of *his* toil.

—"*Yarn-Spinner.*"

Mr. J. Lineham, of Grant & Lineham, has purchased half the stock in the Vancouver *News-Advertiser*.

Mr. Simeon Brubacher, president of the Berlin Office and Fixture Company, died in that city on February 2nd.

Mr. D. Lorne McGibbon has resigned the Presidency of the Canadian Consolidated Rubber Company in order to give more time to the affairs of the Ames Holden McCready Company.



Canadian Knitting Company Limited, Hamilton, Ontario, Manufacturing Cotton Underwear for the Cavalry.

NEW FACTORY FOR HAMILTON.

The United States Horse Shoe Co., Erie, Penn., will erect their Canadian factory in Hamilton.

The new company will be known as the Canadian Horse Shoe Co., Limited, and incorporation has been applied for, with a capital of $300,000. This factory will manufacture horse and mule shoes, toe calks and other horse appurtenances, and will represent an investment of from $125,000 to $150,000. Employment will be given to about 100 hands when the plant is completed. It will ultimately require the addition of a rolling mill, which will give employment to a number of additional hands, the most of these men being high-priced mechanics.

A site has been purchased of 4¾ acres (known as the Trethewey property) on Biggar Ave., next to the Atkins Saw Works, and building operations will be started in about 60 days.

L. A. McIlroy is the President and General Manager of the United States Horse Shoe Co., Erie, Penn.

LABOR DEPARTMENT ON JANUARY PRICES.

The Department's index number wholesale prices was higher for January, standing at 138.6 as compared with 137.3 in December, and 136.5 in January, 1914. The chief features in the price movement was the rapid rise in wheat and other grains and in flour. Higher prices and strong demand in Europe, resulting in heavy export buying on North American markets, demand from millers, unfavorable reports as to shipments from India and Argentine, importation into Australia and New Zealand, the continuance of the closing of the Dardanelles, preventing the export of Russian wheat, speculative buying, and holding of grain by farmers were reported as the factors in the rise. Manitoba wheat rose from $1.22 to nearly $1.50 by the end of January and was still rising. Flour rose 70c. per barrel and was still rising, while some grades had risen still more. Bread advanced in several localities. Rolled oats also advanced in sympathy with oats. The other principal advances were in poultry, butter and cheese, stocks being lighter, and in raw furs and raw rubber, demand being better. Cattle, beef and hogs were downward, demand being light and supplies plentiful. Eggs were downward, receipts being larger as the season advanced, except during a brief cold period. Sugar was again lower, on account of weak prices for raw sugar and light demand, but was firmer at the close of the month. Downward tendencies also appeared in coffee, potatoes, oranges, quicksilver, tin, gasoline, benzine, B.C. shingles, sash cord, wire cloth, turpentine and pulp. Some upward movement appeared in hay, bran, shorts, baled straw, raisins, tea, raw cotton, zinc spelter, spruce deals and linseed oil.

In retail prices there was a general advance in flour, and bread rose in several cities. On the other hand, sugar declined in many localities. Meats showed a downward tendency in some localities.

In Great Britain higher prices were also shown in January, the greatest increases being noted in cereals. The index number of the London *Economist* is up nearly two points, and Sauerbeck's index number, published in the *Statist*, has risen nearly three points. Bradstreet's index number of prices in the United States is 1.2 per cent. higher for January. Dun's index number, including about 200 commodities, although slightly lower on January 1st ($124.16) and on account of weakness in meats, provisions, cotton goods and some building materials, had risen to $125.66 on February 1st, as a result of the pronounced rise in breadstuffs, "primarily due to the insatiable foreign demands." Gibson's index number of food prices in the United States stood at 67.0 at the end of January as compared with 63.2 at the beginning.

Mr. R. McGregor, of Galt, Ontario, president of the Stuart Machinery Company, Winnipeg, has made several changes in the personnel of the Winnipeg staff.

CANADIAN COUNCIL OF AGRICULTURE.

To provide whatever increased revenue is required to meet existing conditions, out of taxes other than by raising the protective tariff, is the suggestion made to the Government by the Canadian Council of Agriculture representing the organized farmers of Canada. At the conclusion of the Saskatchewan Grain Growers' Associations' convention at Regina, the executives of the Grain Growers' Associations of Manitoba, Saskatchewan, Alberta and other Canadian Agricultural Societies, which comprise the Canadian Council of Agriculture, held a meeting, when the matter of the Government increasing the revenue to meet the present contingencies was fully discussed. It was recommended that in order to meet the deficit in the present revenue and eventually to raise the bulk of the national revenue, the system of direct taxation on land values



Employees of the Northern Knitting Company, Winnipeg, Busy Filling War Orders.

should be introduced, supplemented by a graduated tax on incomes. The stamp tax was approved as a temporary measure. The Government was asked to leave feed grain on the free list owing to the present high price of feed. The council would not recommend the granting of the application of the railways for increased freight rates from Fort William east, which they claimed would result in lower prices to the grain producers. Other recommendations to the Council of Agriculture were, that an expert commission be appointed to inquire into the chilled meat exportation; that a recommendation be made to the Grain Commission to request the Government to amend the Grain Act by a sub-section providing that the charge for selling grain shall be subject to such regulation as the board of grain commissioners deemed proper; that the supervision and control of the weighing of grain in all eastern transfer elevators be under the direction of the commission.

"MADE-IN-CANADA" FALSE PRETENCES.

The following letter has been received by Sir George Foster from a Canadian druggist, and is printed as written with the omission of names:

"From every quarter comes the cry to have Canadians educated to use 'Canadian-made-goods.' The reason for this need not be here enlarged upon, but as the Canadian producer, distributor and consumer are helping this campaign along, it occurs to me that the Government should be on the lookout for what I would define as trade leeches. I refer more particularly to foreign manufacturers who infer to the public that their product is 'Made-in-Canada' while it is really not so. For example, in looking over my stock of dentifrices I find the majority are of foreign make, and in one case on the outside carton you will find printed in small type 'Made-in-Canada.' Unwrap and investigate further and this slogan is nowhere in evidence but is made by ———— of Paris, New York and London, guaranteed by ———— under the Food and Drug Act, 30th June, 1906, U.S.A., No. 701. The preparation is ————. If this article were 'Made-in-Canada' manufacturers would so state it on the inside container. The goods are made in the United States and the makers print on the outside carton 'Made-in-Canada' to deliberately deceive the Canadian public.

"Have not the Government the necessary machinery to stop this fraud and punish offenders? The Canadian people are co-operating in the 'Made-in-Canada' campaign, and we should know that the wares stamped 'Made-in-Canada' really are made in this country, that there is no evasion."

IN A NUTSHELL.

(From the "Toronto News.")

Here is a little arithmetic problem, fully demonstrated:

Suppose the General Tariff is 30 per cent., and the British Preference, 20 per cent.

Then the British manufacturer has an advantage over foreign competitors in our market of 10 per cent.

But the Government increases the General Tariff by 7½ per cent., and the British Preference by 5 per cent.

That is to say, the impost on Foreign goods becomes 37½ per cent., and on British goods, 25 per cent.

Then the British manufacturer's advantage in our market is 12½ per cent.

Therefore, the British advantage in the Canadian market is better by 2½ per cent. than it was before.

But under the 30 per cent. General Tariff our imports from the United States increased annually, and therefore such an impost is not sufficient to stop trade.

How then can trade with Great Britain be stopped under a new tariff of only 25 per cent.?

"MADE-IN-CANADA" AND THE CRITICS.

By James Johnston, in "Canadian Courier."

When a certain species of carping critic gets hard up nowadays for a good fat straw man that he can put up to knock down again, he goes after the made-in-Canada campaign. And of course there is only one way to do that. The critic puts it up to our Imperial patriotism and says:

"Every boost for the made-in-Canada movement is a knock for the made-in-Britain movement."

This explosive collocation of contrasted ideas naturally gets our attention. He knows we are conscious of a paradox, and he dangles it masterfully in front of our noses.

"It's as plain as a pikestaff," he argues, "that every dollar you induce people to spend extra for goods made in Canada is a dollar taken away from goods made somewhere else that formerly were imported. Isn't it?"

We naturally admit—yes. He hits the nail another whack.

"Well, then, the three main sources of Canadian-imported goods are Great Britain, continental Europe and the United States. Admit that?"

Again we make no demur. He proceeds:

"And of course as the war automatically shuts off our supplies from continental Europe, that leaves us with but two main sources, Great Britain and the United States. Therefore we must knock both British and American imports—especially British." This he says sarcastically.

But the carping critic has overlooked all the essential elements in the case. In the first place, he ignores the real character and motive of the made-in-Canada campaign. The agitation in favor of buying made-in-Canada goods was organized primarily to overcome a prejudice and not to obliterate a preference. Since ever the national policy was started in the days of John A. Macdonald, there has been a degree of prejudice against buying goods made in our own factories. This is not a peculiarly Canadian prejudice. It exists just as strongly in the United States, whose newspapers have undertaken a campaign against it; in England, which is the Mecca for goods of all nations; in Germany, whose ten commercial commandments from the government were intended to keep out foreign-made goods wherever such goods could be made just as well by Germany.

It was to overcome this prejudice that in a critical time like the present, with many factories running on less than full time, the manufacturers, factory workers, and others interested, started the campaign in favor of made-in-Canada goods. The campaign was intended to show that many lines of goods which we formerly imported can be and are made just as well in Canada; that the making and selling of such goods keeps our own labor employed, our own factories busy and our own money in circulation for the general good of the country. Thus the campaign has for its prime motive the overcoming of a prejudice.

In the second place, the factories of Great Britain are in no present need of an expanding Canadian market. As a matter of fact, many of them are so busy now that the Government has to send abroad to get orders filled. British manufacturers at present have more goods to make than they have people to make them. Canadian factories have more people to make goods than they have goods to make. Hence a second reason for boosting the made-in-Canada movement.

In the third place, the British preference still stands. No campaign by the Canadian manufacturers is intended to upset it. No government of Canada will discontinue that preference, which is as fundamental an illustration of Canada's place in the Empire as any phase of self-government.

These three great principles in the campaign the carping critic has overlooked. And on these three counts his argument is only a straw man which he has ingeniously set up.

Canada is at a critical point in her making, and her people would be foolish not to realize it. Wheat may go to two dollars a bushel, but there will be mighty little of it to sell before September next. In the meantime, people must work and eat. The factories must be kept busy. The day has gone by when people could live on real estate speculations, and the railway builders are taking a holiday.

Besides, and above all, Canada cannot buy goods abroad unless gold is exported to pay for them, and those who have the gold in Canada are not likely to give it up without a struggle.

CATALOGUES AND BULLETINS RECEIVED.

Belt Conveyers, and Malleable and Steel Elevator Buckets —Jeffrey Mfg. Co., Montreal.

NEW ZEALAND WANTS CANADIAN GOODS.

In discussing the effect of the war on trade, the *Press*, of Christchurch, New Zealand, states that there is a strong preference forming in favor of Canadian goods. The following remarks from the *Press* will awaken a responsive chord in Canadians:

"In view of the new spirit of patriotism which permeates the Empire, there is undoubtedly now a great chance for certain Canadian goods in the Australasian market. In 1913 New Zealand imported from Canada goods to the value of £452,519, and from the United States goods to the value of £2,107,990. The following table shows that certain articles were imported equally from the United States and from Canada. That being the case, there is certainly the prospect in view of the current feeling towards the States of a patriotic transfer of business taking place, and of a more Imperial balance of trade being established.

New Zealand Imports, 1913.

	Canada. £	U.S.A. £
Cattle	2,700	3,800
Boots and shoes	9,285	20,428
Apparel and slops	11,289	42,172
Motor vehicles and materials	116,608	227,923
Fish	34,173	4,382
Furniture, etc.	9,509	8,660
Glass	4,883	13,456
Hardware, hollow-ware, and ironmongery	4,188	63,919
Iron and steel pipes and fittings	4,595	23,949
Fencing wire	3,035	52,241
Agricultural machinery	44,554	60,306
Sewing machines	2,032	24,831
Paperhangings, etc.	5,307	2,128
Seeds	8,021	16,295
Timber, lathes and shingles	3,598	7,403
Woodenware	3,386	17,484

Other Articles.

"The foregoing table represents those articles which Canada supplies, as well as the United States. Presumably, she is capable of supplying our whole requirements. There are, of course, many articles in which the position of the States is practically unassailable, but if the spirit of Imperial patriotism (now thoroughly evoked) is maintained, the States will be subjected to severe competition on the part of Great Britain and Canada for some of the following lines, of which our imports in 1913 were as given:—Arms and explosives, £13,231; belting, £3,090; motorcyles, £2,348; brushes and brooms, £5,087; canvas, £4,997; confectionery, £5,845; cotton goods, £24,483; fruits, bottled and preserved, £25,492; galvanized iron, staples, etc., £14,831; lampware, £14,257; electric machines, £71,364; other machinery, traction engines etc., £52,000; nails, £26,579; undressed timber, £83,270; tobacco, £80,000; and tools and implements, £87,091.

"The largest individual importation from the United States is in oil—£105,851, for kerosene, and £265,988 for other kinds. A British company is now in the Dominion market supplying motor spirit, so that even these huge figures may be capable of reduction.

"For the moment, perhaps, Canada, owing to the depletion of her industrial forces by her loyal response to the empire's call, may not be able to take full advantage of the opening for new trade now presented, but it is fair to say that the feeling for Imperial preference now called into being will not die, and that in the future the trade of the British Empire will be influenced by sentiment as well as by decimals of cost."

MARCH SAILINGS TO FOREIGN PORTS.

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, March 17; from Victoria, *Makura*, March 17.

Melbourne, Sydney—The New Zealand Shipping Company: From West St. John, *Rakaia*, March, 1915.

China.

To Hong Kong—Blue Funnel Line: From Victoria, *Oanfa*, March 10.

To Shanghai and Hong Kong—Canadian Pacific Railway Co.'s SS. Line: From Vancouver, *Monteagle*, March 27, 1915.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, March 17; from Victoria, *Makura*, March 17.

Great Britain.

To Glasgow (via Panama Canal)—Blue Funnel Line: From Seattle, *Moyune*, February 27; from San Francisco, March 7.

To Liverpool (via Panama Canal)—Blue Funnel Line: From Seattle, *Moyune*, February 27; from San Francisco, March 7.

To Liverpool—White Star-Dominion Line: From Portland, Me., *Zeeland*, March 6; *Irishman*, March 13; *Vaderland*, March 27; from Halifax, *Zeeland*, March 7; *Vaderland*, March 28.

To London (via Panama Canal)—Blue Funnel Line: From Seattle, *Moyune*, February 27; from San Fransisco, March 7.

To Manchester—Manchester Liners, Ltd.: From St. John, *Manchester Merchant*, March 9; *Manchester Spinner*, March 22.

Hawaii.

To Honolulu—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, March 17; from Victoria, *Makura* March 17.

Japan.

To Yokohama, Kobe—Blue Funnel Line: From Victoria *Oanfa*, March 10.

To Yokohama, Koba and Moji—Canadian Pacific Railway Co.'s SS. Line: From Vancouver, *Monteagle*, March 27, 1915.

New Zealand.

To Auckland—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, March 17; from Victoria, *Makura*, March 17.

To Auckland, Wellington, Lyttleton, Dunedin—The New Zealand Shipping Company: From West St. John, *Rakaia*, March, 1915.

Philippine Islands.

To Manila—Blue Funnel Line: From Victoria, *Oanfa*, March 10.

OUTLOOK BRIGHT FOR 1915.

"The year 1915 seems certain to be much better for the business man than 1914, and we should do everything practicable to evidence our faith in future prosperity.

"There are distinct signs of improvement. Sales in many departments are slowly but steadily increasing, and this will probably extend to others.

"The increase in exports is beginning to have an influence upon domestic business.

"The number of travellers on trains, in hotels, shops and other business places is growing larger.

"The inquiries for products in many lines are becoming more frequent. Sentiment in favor of better times is pronounced."—*Judge Elbert H. Gary, President of the United States Steel Corporation.*

CANADIAN NATIONAL EXHIBITION.

The financial statement submitted at the annual meeting of the Canadian National Exhibition, held in Toronto on Feb. 24th, showed gross receipts amounting to $336,150.04 and the expenditures to $310,101.53, showing a clear profit of $26,048.51.

The following directors were elected in the manufacturers' section: Messrs. Geo. Booth, C. A. B. Brown, John Firstbrook, Geo. H. Gooderham, M.P.P., Noel Marshall, W. K. McNaught, Jos. Oliver and T. A. Russell.

DECREASING COST OF PRODUCTION.

The increase in consumption of "Made-in-Canada" goods will mean decrease in cost of production. This decrease will enable Canadian manufacturers the better to meet competition in foreign markets.—*Conservation.*

PERSONAL.

Mrs Karn, wife of D. W. Karn, of Woodstock, died suddenly on February 9th.

Mr. J. L. Pollock is returning to the Stuart Machinery Company as manager.

Mr. W. G. McIntosh has been appointed sales engineer for the Herbert Morris Crane and Hoist Company, Limited, Toronto.

Mr. Charles B. Lester, manager of the sales department of the John McDougall Caledonian Iron Works, Limited, Montreal, died suddenly at his home in that city.

Mr. M. Weir, of Montreal, has been elected president of the Canada Foundries and Forgings Company, Limited, Brockville, Ontario, in succession to John McGill.

Mr. Charles J. Goldmark, Superintendent Engineer of the Canadian Locomotive Company, Kingston, Ontario, has accepted a position in New York. A banquet was tendered him by the officials and foremen of the Company.

Lieut.-Colonel J. W. Woods has been elected to succeed Colonel C. A. Smart as president and managing director of Smart-Woods, Limited, and the Hon. W. C. Edwards, of Ottawa, has been elected to the board.

Mr. C. R. Burt, who has been factory manager of the Russell Motor Car Company, Limited, Toronto, for some time, has been appointed Assistant General Manager and elected to the Directorate. Mr. Burt conducted the Russell engine test in 1914, when several world's records were established.

Some Striking Instances of Hydro's New Rate Reductions

Here are some actual power bills for the month of January, 1915. They are not assumptions or estimates. They are plain, solid

Facts!

INSTANCE NO. 1.

January Power Bill	$2635.80
Under former Hydro rates bill would have been	3363.80
Saving, new Hydro rates or 21.6%.	**728.00**

INSTANCE NO. 2.

January Power bill	$703.12
Under former Hydro rates bill would have been.....	939.61
Saving, new Hydro rates or 25.1%.	**236.49**

INSTANCE NO. 3.

January Power bill	$133.34
Under former Hydro rates bill would have been	153.84
Saving, new Hydro rates or 13.3%.	**20.50**

INSTANCE NO. 4.

January Power bill	$57.05
Under former Hydro rates bill would have been	88.06
Saving, new Hydro rates or 34.2%.	**31.01**

Don't these figures suggest something to you? They certainly ought to be an earnest of what Hydro can do for you if you will give our engineers a chance to figure out your power problem in detail, and state exactly what we can save you, without committing you to anything or costing you one cent?

New rates less than ½ cent per Kw.H.

nett, including all charges of every description whatsoever. Do you Toronto manufacturers realize that you can now obtain Hydro current at this wonderful low-water-mark rate? Think of it—less than ½c. per Kilowatt Hour. **Can you beat it?**

We are at the other end of your telephone wire.

The Toronto Hydro-Electric System

226 Yonge Street **Phone Adel. 2120**

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.

SHEETS TUBES COPPER & BRASS AND RODS

SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT

115-121 SUMACH STREET - - - TORONTO, CANADA



$141,017.00 worth of abrasive wheels imported into this country in the last fiscal year, that should have been "MADE IN CANADA."

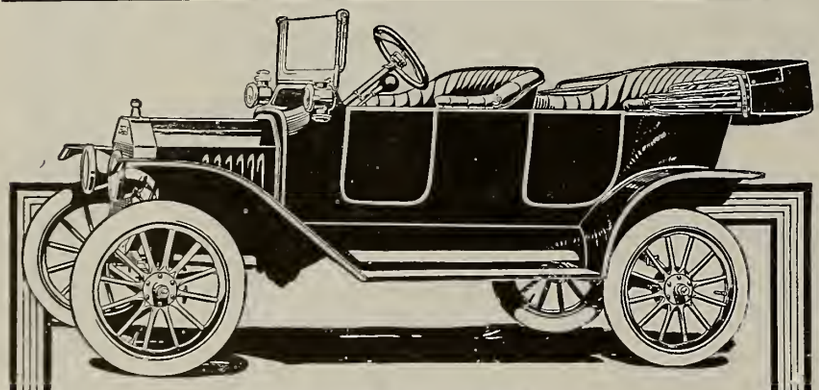
We can furnish the Canadian made goods of the best natural and artificial abrasives, by the vitrified or silicate process; in the latter, with or without the wire web.

Can be obtained from the following supply houses:

J. R. BAXTER & CO., LTD. Montreal
H. W. PETRIE LTD. Toronto
McDOUGALS LTD. Ottawa
COWAN HARDWARE CO. London
WALKERVILLE HDW. CO. Walkerville
NORTHERN CAN. SUP. CO. Cobalt

Or direct from the manufacturers,

DOMINION ABRASIVE WHEEL CO., LTD.
NEW TORONTO, ONT. CANADA



"MADE IN CANADA"

Ford Touring Car
Price $590

Prices of other Ford Cars are: Two-passenger Runabout $540, Two-passenger Coupelet $850, Five-passenger Sedan $1150. All cars fully equipped, including electric headlights. Prices F. O. B. Ford, Ont. Buyers of all Ford cars will share in our profits if we sell 30,000 cars between August 1, 1914 and August 1, 1915. Write Ford Factory, Ford, Ontario, for Catalogue I—1.

Ford
THE UNIVERSAL CAR

TREASURER.

Large Manufacturing Corporation, established 1850, location, Canada, has a vacancy for a highly efficient business man as Secretary and Treasurer. Must be able to invest at least $5,000 cash, and give best of references as to ability and character. Contract with good salary guaranteed to right party. Investment absolutely secured. Answer in full or n oattention paid. Box 12, INDUSTRIAL CANADA.

SALES MANAGER.

A Canadian Farming Implement Mfg. Corporation has an opening for an experienced sales manager, (preferably with experience in the above line), to take full charge of sales department. Attractive salary and commission contract guaranteed to right party. $2,500 cash investment and A1 references required. This is a high-grade proposition for a high-grade man. Correspondence treated strictly confidential. Box 13, INDUSTRIAL CANADA.

FACTORY SUPERINTENDENT.

Position vacant for a high-grade Factory Superintendent, with executive ability, to take full charge of all branches of a Farming Implement Factory in Canada. Applicant must be able to invest $2,500 cash and move at once to Ontario, Canada. Contract with good salary guaranteed to right party. Investment covered by guaranteed security. Apply Box 14, INDUSTRIAL CANADA.

COST ACCOUNTANT WANTED.

Factory cost accountant for large Ontario rubber manufacturing company. Excellent opportunity for accountant who thoroughly understands and who has had practical experience in stores systems, overhead expense distribution and factory cost work generally. Applications, which will be treated strictly confidential, must state age, experience and salary expected. Apply Box 6, INDUSTRIAL CANADA.

A Little Corner in the



Toronto Harbor Industrial District

PREPARE FOR PEACE

"MADE IN CANADA" GOODS WILL BE DEMANDED FROM NOW ON.

Are You Ready to Furnish Your Share?

Build now and save 25% in CONSTRUCTION COST—and 33⅓% in the COST OF LAND.

Write to-day for full information to

THE TORONTO HARBOR COMMISSIONERS

50 BAY STREET ALEX. C. LEWIS, Secretary TORONTO, CANADA

THE

Canadian Bank of Commerce

ESTABLISHED 1867

DIRECTORS

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L., President.
Z. A. LASH, ESQ., K.C. LL.D. - - Vice-President.

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	H. J. Fuller, Esq.
F. P. Jones, Esq.	

General Manager - ALEXANDER LAIRD.
Assistant General Manager - JOHN AIRD.

Paid-up Capital - $15,000,000
Reserve Fund - $13,500,000

The Bank has branches in every Province in Canada, also in New York, Seattle, San Francisco, Portland, Ore., Mexico City, St. John's, Nfld., and London, Eng.

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED

Accurate Thread Cutting

A screw plate that is adjustable will appeal to your workmen. It makes for speed and accuracy. Reece's Screw Plate is adjustable—but it has in addition all the advantages of a solid die.

ORDER A SAMPLE TO-DAY

BUTTERFIELD & CO., INC.
ROCK ISLAND, P.Q. DERBY LINE, VT.



THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . .	$25,000,000
Capital Paid up	$11,560,000
Reserve & Undivided Profits	$13,000,000
Total Assets	$180,000,000

HEAD OFFICE, MONTREAL

BOARD OF DIRECTORS

H. S. Holt, President E. L. Pease, Vice-President
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G. R. Crowe	T. J. Drummond	C. S. Wilcox
	A. E. Dyment	

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E. L. Pease, General Manager
C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

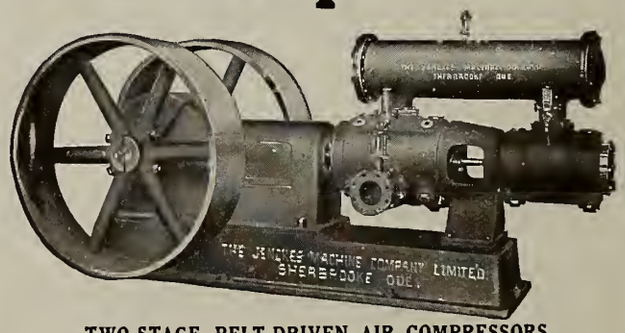
Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

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TWO-STAGE, BELT-DRIVEN AIR COMPRESSORS

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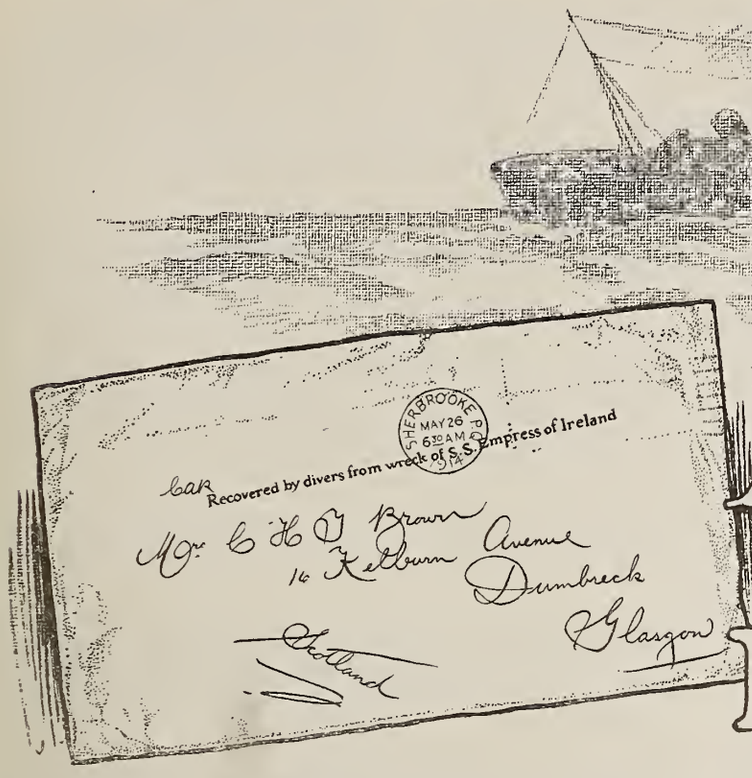
Moderate in cost. Built to successfully stand severe and continuous service. Full range of sizes and types.

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THE JENCKES MACHINE CO., LIMITED

Works:
Sherbrooke, Que.
St. Catharines, Ont.

Sales Offices:
Halifax, Montreal
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A Letter from the Empress Wreck

Recovered by divers from the bottom of the St. Lawrence after being nearly eight months in the water. As legible as the day it was written.

Underwood's EVERLASTING BANK Ink

"LASTS AS LONG AS THE PAPER"

Posted at Sherbrooke, Que., in May of last year, by Mr. G. F. Brown, to his mother in Scotland, the letter had gone down with the big vessel, and though under water for months, it was returned to Mr. Brown in surprisingly good condition. The envelope is stained and discolored, but the address itself is perfectly legible.

Mr. Brown was so surprised at the wonderful permanency of the ink that he forwarded the envelope to us with the circumstances relating thereto.

It is worthy of note that both the letter and the address were written with Underwood's Everlasting Bank Ink.

Of course, we realize that in the common everyday run of things it is rare, except possibly in case of fire, that writing ink is called upon to stand a test so searching and so stringent. But for the man, or the firm or the corporation or financial institution that wishes to preserve valuable records through long years with the certainty that they will be as legible in March 12, 1951 as they are March 12, 1915, this little incident regarding Underwood's Everlasting Bank Ink will not be without its significance.



"Underwood's Ink lasts as long as the paper" and that means as long as human needs require it.

JOHN UNDERWOOD & COMPANY

NEW YORK — 90 Richmond Street East, TORONTO — LONDON, ENG.

Made-in-Canada for 30 years.

The Canada Metal Co., Limited

Manufacture in Canada

Our Babbitt Metals Give Excellent Service



We are Proud of the Goods We Manufacture

FOR GENERAL MACHINERY BEARINGS

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Harris Heavy Pressure

THE BABBITT METAL WITHOUT A FAULT

WE HAVE EVERYTHING IN METALS

Ask for Our New Catalogue. Mailed FREE on Request

THE CANADA METAL CO., LIMITED

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Established 1849

BRADSTREET'S

Capital and Surplus - - $1,500,000

Offices Throughout the Civilized World

Executive Offices: Nos. 346 and 348 BROADWAY, N.Y. CITY, U.S.A.

THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying, and promulgating information, no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary, and business corporations. Specific terms may be obtained by addressing the Company at any of its offices. CORRESPONDENCE INVITED.

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THOS. C. IRVING, Gen. Man. Western Canada, Toronto

MORTON, PHILLIPS & CO.

Stationers, Blank Book Makers
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115 NOTRE DAME ST. WEST, MONTREAL

Works: Gillette Building, 73 St. Alexander Street

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

481. **Discs for Milk Bottles.**—A London manufacturers' agent makes inquiry for names of Canadian makers of discs for milk bottles, etc.

482. **Folding Chairs.**—A Cape Town agent with connection in all centres of South Africa is prepared to take up agency for folding chairs made of maple, birch or oak.

483. **Church Furniture.**—Correspondence is requested by a Cape Town agent who has a large connection throughout South Africa.

484. **Deck Chairs.**—A Cape Town firm requests catalogues and correspondence with complete information on deck chairs. Will purchase or act as agent for South Africa.

485. **Tables, all kinds.**—Correspondence is requested by a Cape Town agent with large connection throughout South Africa.

486. **School Desks.**—A Cape Town commission agent is prepared to take up agency for Canadian school desks.

487. **Stoves.**—A Cape Town agent is prepared to handle on commission. Immediate correspondence is requested with full particulars.

488. **Roofing.**—A South African commission agent is open for agency in Canadian roofing. Immediate correspondence with full particulars requested.

489. **Wheels.**—A Cape Town commission agent asks for immediate correspondence with full particulars re agency in Canadian-made wheels. Prices should be f.o.b. Montreal or St. John.

490. **Carriage Material.**—A Cape Town commission agent asks for full particulars re agency for Canadian carriage material. Quotations should be f.o.b. Montreal or St. John.

491. **Asbestos Sheets.**—Inquiry is made by a South African commission agent re agency in Canadian asbestos sheets. Prices should be f.o.b. Montreal or St. John.

492. **Canned Fruits.**—A Cape Town commission agent is prepared to take up agency in South Africa for Canadian canned fruits. Prices must be f.o.b. Montreal or St. John.

493. **Cheese.**—A Cape Town commission agent asks for immediate correspondence re agency in Canadian cheese. Quotations must be f.o.b. Montreal or St. John.

494. **Woodenware.**—Inquiry is made by a South African commission agent re agency in Canadian woodenware. Illustrated catalogues with f.o.b. prices requested.

495. **Wood Pulp.**—A London firm who are purchasers of wood pulp invites prices and particulars from Canadian manufacturers.

496. **Fish Tins.**—Canadian manufacturers of fish tins are asked to correspond with a Newfoundland dealer.

497. **Garbage Destructor Plant.**—An English firm of importers in South America would like to hear of a Canadian firm manufacturing these.

498. **Agricultural Implements.**—A broker in Paris invites correspondence from manufacturers of agricultural machinery, prices including freight, insurance and duty, amounting to $2.40 per 210 pounds net on mowers and reapers and other machines weighing over 840 pounds, and to $3 per 210 pounds net on other machines.

499. **Wood.**—A Glasgow firm asks to be placed in touch with Canadian exporters of dressed and plain wood for cases and crates, pit props, etc.

500. **Woollen and Knitted Goods, Clothing, Blankets, etc.**—A Paris drapery house desires to get into immediate touch with Canadian manufacturers of woollen hosiery, knitted goods, woollen gloves, woollen underclothing, caps, comforters, knitting wool, swanskins, flannels, woollen belts, blankets (woollen and cotton), grey woollen cloth, blue-cloth trousers and smocks, flannel shirts, etc. Full catalogues, samples and quotations are required for immediate delivery, and information as to weight of cloths per metre, etc., for customs purposes, should also be included.

501. **Paraffin Wax.**—A Paris concern desires to get in touch with manufacturers of paraffin wax. Cost of freight and insurance from seaboard to Havre should be indicated.

502. **Acetates of Amyl and Ethyl.**—A Paris house wishes to communicate with producers of acetates of amyl and ethyl. Prices c.i.f. Havre or cost of freight and insurance indicated.

503. **Woodworking Machinery.**—A Japanese firm in Tokyo wishes to get into communication with manufacturers and exporters of woodworking machinery in Canada, and to receive catalogues from same.

504. **Broom Handles.**—A Bristol firm wants broom handles, 50 by 1⅛ inches, in carload lots c.i.f. Bristol; as much under 14s. a gross as possible. First quality, free of all defects; second and third quality at proportionate less price.

505. **Cobalt Oxide.**—A London firm who wishes to contract for considerable supplies of cobalt oxide invites offers from Canadian smelting enterprises.

506. **Bentwood Hoops.**—A London firm is in a position to handle large quantities of bent beech hoops as used in the manufacture of trunks, hat boxes, etc., and invites samples and quotations from Canadian manufacturers. Further details can be obtained from the Department of Trade and Commerce upon application.

507. **Export to Spain.**—A commission merchant in Barcelona who gives references is prepared to act for Canadian manufacturers and shippers looking for export trade in Spain.

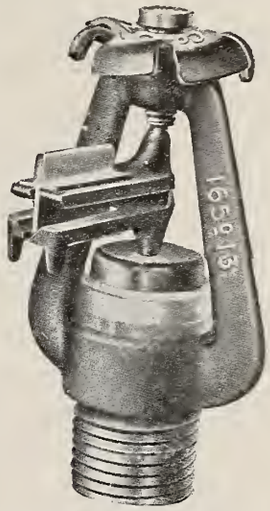
Fire Insurance Rates Reduced about 80%

on all plants that are equipped with

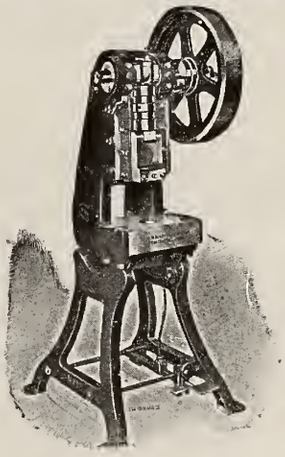
MANUFACTURERS' AUTOMATIC SPRINKLERS

This reduction is recognition by Fire Insurance Companies of the reliability and efficiency of this sprinkler system, and amounts to a saving large enough to cover the cost of a complete equipment in five years or less.

Now is the time to install it.



THE GENERAL FIRE EQUIPMENT CO., LIMITED
72 Queen St. East, Toronto, Canada



POWER PRESSES
DROP AND SCREW

SHEET METAL STAMPINGS
DIES AND TOOLS

W. H. Banfield & Sons
120 Adelaide W. - Toronto

CHIEF OFFICE FOR CANADA, TORONTO

LONDON & LANCASHIRE FIRE INSURANCE COMPANY LIMITED

ALFRED WRIGHT, Manager, 8 Richmond St. E.

508. **Horseshoes.**—A Cape Town firm makes inquiry for Canadian-made horseshoes. Shoes must be finished with the holes distinctly clear, as more than seven-eighths of the shoes are put on cold by the farmers.

509. **Box Shooks.**—Quotations are asked for fruit boxes, not less than 50,000 wanted, which must be made from clear white pine. Box 18 by 12; tops and bottoms, 5½ wide by ¼; ends, ⅝; depths, 2, 2¼, 2½, 2¾, 3, 4, 5, 6, by ¼.

510. **Box Shooks.**—Quotations are asked on 50,000 boxes, which must be made from clean white pine. The actual sizes wanted are: 8 pieces 26 by 5½ by ¼, 3 pieces 12 by 12 by ⅝, 2 pieces 11½ by ¾ by ⅜.

511. **South African Commission House.**—A South African commission house is prepared to take up agency for Canadian-made baths, chain blocks, mine cars, forgings, engineers' supplies, wire ropes for mines, steel shovels, machine tools, steel plates and angles, and steel structure work. Immediate correspondence with full information required. Quotations should be f.o.b. Montreal or St. John.

512. **Parchment, Paper, Box Shooks, etc.**—A firm in Natal, South Africa, desires to obtain the following from Canadian exporters: Gelatine, woodmeal, saltpetre, parchment (size of sheet 21¼ by 33, 500 sheets to ream, 36 pounds to ream); brown wrapping paper; box sets, shooks (quotations on basis of 15,000 or 20,000 a month). Samples are requested.

513. **Three-ply Wood.**—A London manufacturing company who use large quantities of ⅜-inch three-ply alder in sheets 48 inches by 48 inches or larger, invites samples and quotations from Canadian manufacturers who can ship regular supplies.

514. **French Buying Agents.**—A firm who have been appointed buying agents in Canada for several French firms desires to get in touch with Canadian producers and exporters of the following: Hides and skins, wools, woollens, asbestos fibre, nickel, nickel chrome, chloride of lime, leather (chromed and tanned), boots and shoes, harnesses, buckles for saddlery, machine tools, oils and grease for automobiles, carriages and lorries.

515. **Portland Cement.**—A Newfoundland firm asks for names of Canadian manufacturers.

516. **Household Goods.**—A firm in Northern France invites correspondence and quotations from manufacturers of household goods in iron, brass, aluminum and nickel.

517. **Woodpulp.**—An agent in Paris desires to get in touch with manufacturers of mechanical and chemical pulp.

518. **Lumber.**—A Paris dealer invites correspondence from exporters of building timber and hardwood used in the manufacture of furniture.

519. **Dowel Rods.**—A London firm wishes to contract for large and regular supplies of white hardwood birch and maple dowel rods according to specification, to be clean, smooth, free from knots and in bundles. Prices required ex dock London in shillings per thousand dowels.

520. **South African Agency.**—A South African firm of commission agents with travelling covering all centres asks for immediate correspondence, with illustrated catalogues and full information, re agency for the following: Chairs, tables, veneer (3-ply oak, quotations f.o.b. Montreal or St. John), veneer (3-ply walnut), military barrels (suitable for transport wagon, holding 5 to 15 gallons), canned fruit, evaporated apples, flour, washing machines, organs, woodenware, stepladders, wooden buckets and handles.

521. **South African Agency.**—A South African commission agent covering the whole of South Africa, with sub-agents in the principal centres, requests correspondence for agency in Canadian condensed milk, colors and paints, carbolineum, asbestos slates, corrugated asbestos sheets, anti-rust paint, fencing standards and droppers, laundry machinery, leather, wrapping paper, furniture, brushware, brooms, folding chairs, cheap furniture, preserved fish, pianos, organs, electric novelties, electric heaters and electric irons.

522. **Handles.**—A Wolverhampton firm is open to consider quotations and samples of shovel, spade, fork and pick handles.

523. **Handles.**—A Wednesbury firm inquires for 36-inch hickory wedge and handles and ash miners' axe handles.

524. **Handles.**—A Birmingham firm inquires for "D" shovel handles in three grades, XX, X and No. 1's; also ash stems for crutch handles in lengths from 28 inches to 36 inches; also hay fork handles from 4 feet to 8 feet; fork handles, 3½ feet and 4 feet; long shovel handles, 4½ feet; rake handles, 5½ feet and 6 feet; also hickory pick handles 36 inches.

525. **Handles.**—A Cannock firm is open to purchase axe, hatchet and pick handles made from good quality ash. Samples should be sent and quotations delivered Liverpool.

526. **Pick Handles.**—A London firm desires immediate quotations for 50,000 hickory navvy pick, and 20,000 hickory miner pick handles. Canadian manufacturers can obtain further details upon application to the Department.

527. **Broom Handles.**—A London firm who are in the market for 500 to 1,000 gross of bass, birch and ash broom handles, 50 inches by 1⅛ inches, desires c.i.f. prices from Canadian manufacturers.

528. **Piano Actions.**—A London firm of piano manufacturers asks to be placed in correspondence with Canadian manufacturers of piano actions, of which they seek supplies.

529. **Sales Agencies.**—An Englishman, stated to have lived in Canada ten years and offering Canadian bank references, is prepared to undertake sales agencies for Canadian goods.

530. **Shovel Handles.**—A New Whittington firm can take immediately, if prices and quality are satisfactory, 5,000 gross divided as to quantity: 700 gross of 13 inches; 1,200 gross of 12 inches; 1,100 gross of 10½ inches; 2,000 gross of 9½ inches. Handles must be made of birch, although beech would be considered. Ash is not wanted. Quotation must include delivery at the works via Midland Railway, Staveley Station. Goods must be packed in cases, not bags.

Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B. in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth) East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

For rates of freight and other information apply to

ELDER DEMPSTER & CO., Limited
318-319 BOARD OF TRADE BUILDING - - MONTREAL
Toronto Agent: S. J. SHARP, 19 Adelaide E.

GENERATOR FOR SALE.

One direct current generator, compound wound. Capacity 400. 16 C.P. lamps. 110 volts. Speed 1275 R.P.M. In first-class condition. Apply to Howard, Smith Paper Mills, Montreal.

MANUFACTURERS' REPRESENTATIVES.

A Winnipeg firm are anxious to represent Eastern manufacturers in lines outside of building papers. Address, Box 10, INDUSTRIAL CANADA.

ECHOES OF MADE-IN-CANADA CAMPAIGN.

FAIT AU CANADA.

From *Le Prix Courant.*

F	ils du sol aux touffus érables,	F
A	yons à coeur notre avenir,	A
I	l faut pour cela bien s'unir	I
T	ous, et nous en sommes capables.	T
A	u lieu de voir en l'étranger	A
U	n quidam à encourager,	U
C	hez nous gardons tout ce qui compte,	C
A	chetons ici, exigeons	A
N	os produits et nos provisions,	N
A	ussi portons sans fausse honte	A
D	es vêtements taillés, finis	D
A	vec l'ETOFFE DU PAYS.	A

FAIT AU CANADA.

THE
New Zealand Shipping Company, Limited
CANADA
TO
Australia and New Zealand

Regular monthly sailings from Montreal in summer and St. John in winter, calling at Adelaide, Melbourne and Sydney (Australia), and Auckland, Wellington, Lyttelton and Dunedin (New Zealand). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

The New Zealand Shipping Co.
LIMITED
213 Board of Trade Building, Montreal

DU PONT FABRIKOID
REG. U.S. PAT. OFF.

FOR UPHOLSTERY

Leather for upholstery must be thin, pliant and strong. Three quarters of such upholstery leather is the thin, fleshy "splits" peeled from the animal's hide and coated and embossed to represent grain leather. Du Pont Fabrikoid is

TWICE AS STRONG AS COATED SPLITS

because of its specially made cloth backing. Its surface is waterproof and grease proof and not affected by heat or cold.

MOTOR QUALITY FABRIKOID is the upholstery material used by several of the largest automobile, carriage and railway car manufacturers.

CRAFTSMAN QUALITY FABRIKOID is the standard material for covering furniture.

Special grades, patterns and shades for bookbinding, travel goods, novelties and articles requiring the use of hide leather. State intended use, and ask for samples and prices.

ADDRESS DEPT. 453

DU PONT FABRIKOID CO.
TORONTO, ONTARIO, CANADA

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA

Carlstadt, Alta.

The elevator of the Weist Grain Company which was recently destroyed by fire will be rebuilt.

Daysland, Alta.

The Burrard Grain Company will rebuild their elevator, which was recently destroyed by fire.

Macleod, Alta.

Macleod Flour Mill Company have leased the Alberta Co-operative Elevator here and will use it until their own elevator, which was recently burned, is rebuilt.

Cardston, Alta.

The whole of the stonework for the Mormon temple now building at Cardston, Alta., is being supplied by the Kootenay Granite Company from their quarries at Nelson, B.C., the total value being approximately $250,000, and 360 car loads in quantity.

BRITISH COLUMBIA

Cranbrook, B.C.

The Canadian Wood Distilling Company has been incorporated with a view to establishing a wood distilling plant in Cranbrook, B.C. A very large quantity of lumbermen's waste and stumps are available in the district, and practical tests already carried out under the inspection of the Department of Agriculture has given successful returns. The Provincial Government is to be approached with a view to securing financial aid for the establishment of the industry on a sound footing. H. C. Moore is the manager of the company.

Fort George, B.C.

There is talk of building a $70,000 brewery here.

Grand Forks, B.C.

The Granby Smelting and Refining Company have granted an increase of ten per cent. in wages at their Grand Forks smelters dating from February 1st. With the increase of 10 per cent. granted on January 1st the men are now working on a 10 per cent. reduction on the wages prevailing before the war.

Nelson, B.C.

The Nelson board of trade have made arrangements with a number of farmers of the district to plant a quantity of sugar beets during the coming season, with a view to having full tests made with date available, in order to assist the industrial committee in its endeavors to have a beet sugar factory established in Nelson.

New Westminster, B.C.

The Laminated Materials Company of Boston, Mass., are making arrangements with the Dominion Match Company to lease their factory at Brunett River for the purpose of establishing a branch to manufacture laminated wood.

The plant of the New Westminster Wire and Nail Works on Lulu Island has been acquired by G. W. Laidlaw, Vancouver. He specializes in crosshead bale wire for baling hay and in barrel hoops, and the plant will also turn out staples.

Queen Charlotte Islands, B.C.

A company is being formed for the manufacture on a large scale of kelp from the extensive sea weed beds on the Queen Charlotte Islands and other points along the northern shore of British Columbia. We understand that influential men are behind the project, and special legislation placing the regulation of the industry under the Fisheries Commissioner is now before the Provincial Legislature. The products of kelp-reduction are potash, iodine, algin and other bye-products. The new Act provides for the payment of an annual license of $100.

Robson, B.C.

The Doukhobors will erect a new lumber mill near Robson, B.C.

Rossland, B.C.

P. Burns & Co., Ltd., will instal a cold storage plant at Rossland, B.C.

Royal Oak, B.C.

The municipality of Saanich, B.C., is taking tenders for the installation of a water works system here. The estimated cost is $375,000.

Vancouver, B.C.

The building and plant of the Westminster Wire and Nail Works at New Westminster has been acquired by G. W. Laidlaw of Vancouver, manufacturer of bale ties and barrel hoops, who will transfer his own plant to the new location.

The Sidney Rubber Roofing Company, Ltd., are making an experimental shipment of material to South Africa, and trial shipments are also going forward of canned salmon and of box shooks, in an endeavor to establish a direct trade in these lines, in the anticipation of the establishment of a regular steamship line from Vancouver to South African ports, the trade at present being served by irregular sailings of lumber ships.

The plant and equipment of the Pacific Chocolate Co., Ltd., in liquidation, has been purchased by Ramsay Brothers & Co., Ltd., Vancouver, and will be removed from New Westminster to the factory of the latter.

The Stewart Mining and Development Company of Butte, Montana, has purchased the Qautsino Sound Copper Company's property on Vancouver Island for a sum reported to be $1,500,000, and will shortly let a contract for the construction of an electric railway twelve miles long and a hydro-electric plant.

The Burrard Inlet Bridge Company have awarded the contract to C. A. P. Turner of Vancouver for the construction

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of the bridge over the Second Narrows at Vancouver at a cost of $1,720,000, contingent upon certain alterations being made in the specifications, according to the report of Ralph Modjeski, of Chicago, and provided that financial arrangements can be made. The contract will not be signed until the final plans are approved and arrangements made. The steel work will be fabricated by the Canadian Northwest Steel Company and John Coughlan & Sons, Ltd., of Vancouver.

Vernon, B.C.

The Sharp and Irvine Gold Company of Spokane, Wash., have purchased for $53,000 the property of the Siwash Creek Hydraulic Gold Company at Vernon and propose to form a new company to equip and operate it.

Victoria, B.C.

A straw hat manufacturer from Luton, England, has been in Victoria looking into the possibility of establishing a factory in that city. It is stated that the climate is very suitable for the industry, and the straw plait can be imported direct from China and Japan.

NEW BRUNSWICK

St. John, N.B.

The announcement has been made by Manager Anson, of the Atlantic Sugar Refinery Company, that the work of manufacturing sugar will begin in the St. John plant as soon as the vessels arrive which have been chartered to bring the raw sugar here. The company have one of the best equipped refineries in Canada and they are looking forward to doing a large business.

The big fish plant at St. Andrews, N.B., of the Canadian Sardine Company, which cost in the neighborhood of one million dollars, and which has been idle and in the possession of the Bank of Nova Scotia for over a year past, has been sold to the Gloucester, Mass., packing firm of Laing, Libby & Co., who will take up the packing and sale of all kinds of food fish. The plant is adjacent to one of the best fishing areas in the Bay of Fundy, and the enterprise should prove a success. It is the intention of the new company to erect a cold storage plant in connection with the works.

The Atlantic Sugar Refineries, Limited, have just produced the first barrel of sugar from their new plant. The company's products will be in the hands of wholesalers within two weeks.

NOVA SCOTIA

Windsor, N.S.

H. C. Burchill, of Sydney, N.S., is interested in a company which proposes to establish a plant here for quarrying and milling limestone and shale.

ONTARIO

Brampton, Ont.

The carpentry work for Lindner's Jam Factory, which will cost $20,000, will be done by day labor under the supervision of the architect.

Brantford, Ont.

The Brantford Scales Company are contemplating building a new factory.

Brockville, Ont.

A 4,000,000 gallon filtration plant will probably be installed.

Chatham, Ont.

A plant will be built here by the Rotary Engineering Company which will give employment to fifty-five first-class mechanics, besides other labor.

The Defiance Iron Works have been offered $18,000 by the Augustine Automatic Rotary Engine Company of Canada, Limited, Toronto Arcade, Toronto, for their factory.

Copper Cliff, Ont.

It was officially announced that the Canadian Copper Company will resume operations at No. 2 and Crean Hill mines, and the two idle furnaces at the smelter at Copper Cliff are to be started up. In a short time the company will have returned to normal output, as existed previous to the outbreak of the war last August.

Dundas, Ont.

Messrs. Brown and Liddy have made arrangements for the establishment of a box factory.

Fort William, Ont.

It is reported that Barnet & McQueen have been awarded a contract for the new addition to the Ogilvie Flour Company elevator.

Guelph, Ont.

Messrs. Alex. Simmers and W. Shiply, Canadian Manager of the New Idea Spreader Company, of Coldwater, Ohio, have looked over a site for a Canadian branch here.

Hamilton, Ont.

The Proctor Gamble Company, Ivorydale, Ohio, will purchase machinery for their new $1,000,000 soap factory here.

Lindsay, Ont.

The Sylvester Manufacturing Company, Limited, contemplate an addition to their factory at an estimated cost of $10,000, for the manufacture of gasoline engines.

Ottawa, Ont.

The Customs House which is being erected for the Dominion Government is being advanced rapidly by the general contractors, Messrs. Peter Lyall & Sons Construction Company.

"Curtiss Aeroplanes and Motors, Limited," which has been incorporated by letters patent, with head offices in Toronto, is authorized to manufacture all kinds of aeroplanes, hydro-aeroplanes, sea-planes, flying boats, air ships, dirigible and other balloons and other aircraft, flying machines and devices for aerial navigation, besides motor vehicles, engines, etc. The company is empowered also to establish schools for instruction of pilots and mechanics for aerial navigation, and to issue certificates of qualification.

Stratford, Ont.

A new creamery factory will be erected here by Mr. L. O. Jackson.

Sudbury, Ont.

Dining room equipment, tables, chairs, writing room furniture, desks, etc., barber shop fittings, chairs, etc., rotunda lounging chairs, cuspidors, etc., bedroom furnishings, revolving doors, and refrigerating machinery will be required for the new $75,000 hotel being built for Mr. D. M. Morin, Nickel Range Hotel.



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TORONTO WINNIPEG MONTREAL

ST. JOHN HALIFAX

Toronto, Ont.

One thousand five hundred men are now being employed in the works of the Massey-Harris Company, according to a statement made by President Sir Melvin Jones.

The Rudd Paper Box Company will rebuild the section of their factory destroyed by fire.

The Butterick Publishing Company, New York City, has completed a contract for the lease of a building to be erected for them on Wellington Street, near Spadina Avenue.

Windsor, Ont.

The Windsor Manufacturing Company are erecting a factory.

QUEBEC

Hochelaga, Que.

The shoe factory owned by the Maple Leaf Shoe Company has been totally destroyed by fire at a loss of $15,000.

Maisonneuve, Que.

The Montreal Toy and Novelty Company is asking for exemption from taxation on a factory which they will erect here for the manufacture of toys.

Montreal, Que.

Tenders will shortly be called for the electrical work in connection with a $32,000 factory now being built for the Martin Senour Paint Company.

The firm of Paul Lair, who have been manufacturers of gas engines and specialties in Montreal for many years, have established a manufactory for motor cars. The output for the present will be confined to two and four seated passenger cars to be known as the "Canadian" car.

Furnishings are required for the new $150,000 office building of the National Trust Company.

Quebec, Que.

It is expected that operations will begin early in March for the new shoe factory of the Touriguy & Marois Company.

The Quebec Abattoir Company contemplate erecting an abattoir.

Sault au Recollet, Que.

The $16,000 hotel owned by Mr. Jas. Cote, which was destroyed by fire, will be rebuilt in brick and stone.

Sherbrooke, Que.

One of the first American industries to seek a Canadian location since the war began is a New York silk concern, which will establish here.

SASKATCHEWAN

Regina, Sask.

A number of Regina business men have organized a company to develop the fields of lignite coal in the southern part of Saskatchewan.

Regina has a new and thriving industry, the Saskatchewan Broom Company having commenced operations in the city. Already six men are employed and provisions are being made for extensions in the immediate future. The company is receiving good support, and the demand for their "Made-in-Canada" brooms is rapidly increasing.

FIVE PER CENT. ADVANCE IN CANADIAN FREIGHT RATES

The following are the tariffs which have been announced by Canadian Railways as a result of the recent decision of the Interstate Commerce Commission of the United States, which empowered United States railways to increase their tariffs by 5 per cent.

These rates apply only on international traffic.

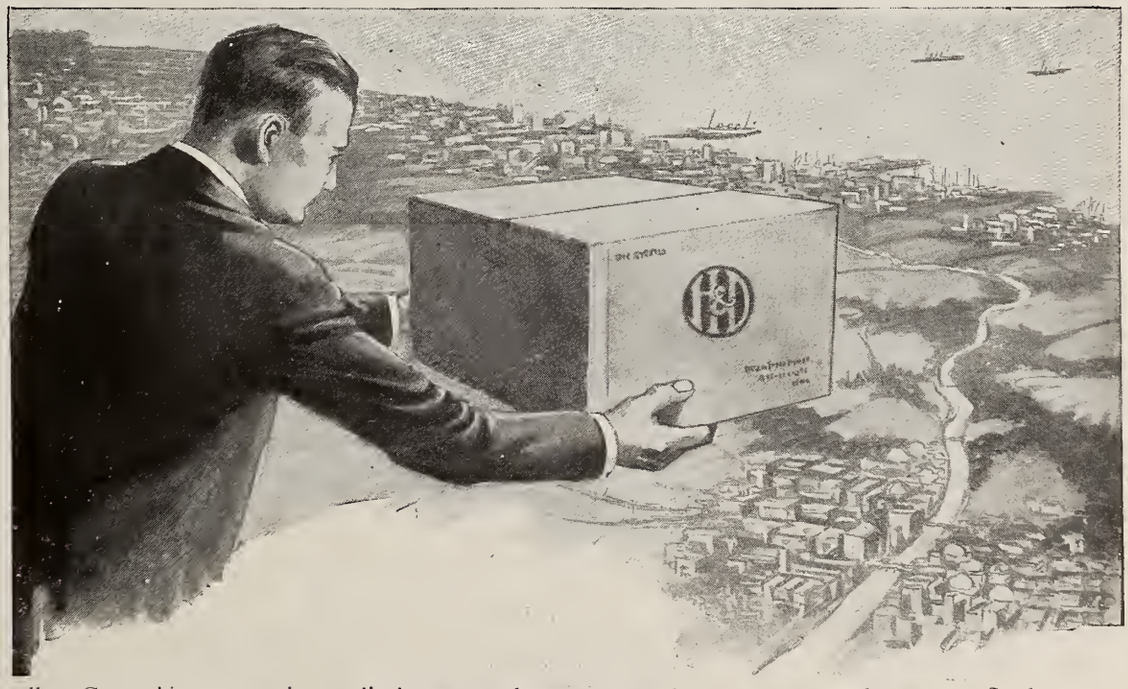
C.R.C.	R.R. No.	Effective.	Descriptions.
Canadian Pacific Railway.			
E 2936 cancels E 1533 2323 2326	E 2571 cancels E 1118 1925 1926	Feb. 17-15	Class rates, C.P. and G.P.H. stations to stations on N.Y.C., W.S. and N.Y.O. & W. Rys. Advances.
E 2937 cancels E 2893	E 2524 cancels E 2524	Feb. 15-15	Paper, C.L., C.P. stations to points in U.S. Advance.
E 2940 cancels E 2879	E 2575 cancels E 2509	Feb. 15-15	Class rates, C.P. and G. P. & H. stations, to Western U.S. points. Advance.
E 2943 cancels E 1665 1691	E 2578 cancels E 1252 1276	Feb. 16-15	Class rates, C.P. stations and connecting lines to St. John, Halifax and Boston, for export. Advance.
E 2944 cancels E 2189	E 2579 cancels E 1785	Feb. 15-15	Commodities, C.P. stations and connecting lines to St. John, W. St. John, Campbellton and Halifax, for export. Advance.
E 2945 cancels E 1654	E 2580 cancels E 1241	Feb. 16-15	Class rates, C.P. stations and connecting lines to Buffalo, Black Rock and Suspension Bridge, New York. Advance.
E 2946 cancels E 2491	E 2581 cancels E 2091	Feb. 15-15	Commodities C.P. stations and connecting lines to Baltimore, New York, Boston, etc., for export. Advance.
E 2947	E 2582	Feb. 17	Wheat, corn and oats, Port McNicoll to U.S. points, to be milled at Peterboro. Advance.
E 2930 cancels E 2907	E 2564 cancels E 2542	Feb. 15-15	Grain and grain products, C.L., C. P. stations and connecting lines to points in Maritime Provinces.
Sup. 1 E 2442 Sup. 6 E 1233	Sup. 1 E 2042 Sup. 6 E 814	Mch. 8-15	Cancellation of special commodity rates on apples and pears, C.L. to Montreal and Ottawa. Advance.
E 2941 cancels E 2810 2883	E 2576 cancels E 2435 2513	Feb. 16-15	Class and commodity rates, Detroit to stations in Canada. Advance. Reduction.
Sup. 14 E 1672	Sup. 14 E 1259	Feb. 15-15	Grain and grain products, C.P. stations to St. John, W. St. John and Halifax for export. Advance.
Sup. 17 E 1697	Sup. 17 E 1284	Feb. 17-15	Class rate, C.P. stations to points in U.S. Advance.
Sup. 1 E 2122	Sup. 1 E 1718	Feb. 15-15	Classes, C.P. stations to points in N.Y.C. and W.S. Railroads. Advance.
Sup. 10 E 2303	Sup. 10 E 1903	Feb. 15-15	Class rates to Detroit and stations west from C.P. stations. Advance .
Sup. 9 E 2412	Sup. 9 E 2012	Feb. 15	Class rates, C.P. stations to points in New York, Penn. and N.J. Advance.
E 2981 cancels E 2205	E 2566 cancels E 1801	Feb. 15-15	Hay and straw, C.L., C. P. stations to points in U.S. Advance.
E 2932 cancels E 1687	E 2567 cancels E 1274	Feb. 15-15	Class rates, C. P. and G.P. & H. stations to points in U.S., also export to New York, Philadelphia and Baltimore. Advance.
E 2933 cancels E 1421 2529	E 2568 cancels E 1005 2133	Feb. 15-15	Commodities, C. P. stations and connecting lines to points in N.S. Advance. Reduction.
E 2934 cancels E 1426 1616 1675 1753	E 2569 cancels E 1010 1203 1262 1341	Feb. 17-15	Class rates, C.P. stations and connecting lines to points in New England and New York state. Advance.
E 2935 cancels E 1670 1673 2426 2795	E 2570 cancels E 1257 1260 2026 2419	Feb. 15-15	Grain and Grain Products, C.P. stations to Albany, Philadelphia, New York, Boston, etc., also export via American Ports. Advance.
Grand Trunk Railway.			
E 3065 cancels E 2211	C. O. 93 cancels C. O. 84	Feb. 15-15	Petroleum and products, Buffalo, Black Rock and Suspension Bridge, N.Y., to G.T. stations. Advance.
E 3066 cancels E 2995	C.U. 96 cancels C.U. 92	Feb. 23-15	Commodities, Buffalo, Black Rock and Suspension Bridge to stations in Canada. Advance.
Sup. 16 E 2696	Sup. 16 I 144	Mch. 3-15	Import freight, Portland, Me., to points in Canada. Advance.
E 3060 cancels E 3041	C.G. 83 cancels C.G. 82	Feb. 15-15	Grain and Grain Products, G.T. stations to points in Maritime Provinces. Advance.
E 3108 cancels E 2476	V 65 cancels V. 36	Mch. 2-15	Class rates, Montreal to Harlem River, N.Y. Advance.
E 3095 cancels E 2076 2753	C.P. 118 cancels C.P. 61 100	Mch. 1-15	Woodpulp C.L., Bramptonville, Danville and Kingsey, P.Q., to U.S. points. Advance.
Sup. 17 E 1859	Sup. 17 C.G. 47	Feb. 15-15	Grain and Grain Products, stations in Canada to Boston, Portland, Halifax and St. John for export. Advance.
Sup. 3 E 2394	Sup. 3 V. 23	Feb. 17-15	Class rates, G.T. stations to D.L. & W.R.R. stations. Advance.
Sup. 7 E 2487	Sup. 7 V. 33	Feb. 18-15	Class rates, stations in Canada to points in D & H. Co. Advance.
Sup. 13 E 2664	Sup. 13 B. 24	Feb. 16-15	Class rates, between Buffalo, Black Rock, Suspension Bridge and points in Canada. Advance. Reduction.

C.R.C.	R.R. No.	Effective.	Descriptions.
Grand Trunk Railway.			
Sup. 8 E 2420	Sup. 8 V. 26	Feb. 23-15	Class rates, Gananoque to points on D.L. & W. R.R. Advance.
Sup. 11 E 1544	Sup. 11 V. 7	Feb. 15-15	Class rates, stations in Canada to points in U.S. Advance.
Sup. 6 E 1844	Sup. 6 V. 11	Feb. 15-15	Class rates, stations in Canada to points in U.S. Advance.
Sup. 18 E 1860	Sup. 18 C.G. 48	Feb. 15-15	Grain and Grain Porducts, stations in Canada to Boston, Mass. and Portland, Me. Advance.
Sup. 17 E 1861	Sup. 17 C.G. 49	Feb. 15-15	Grain and Grain Products, stations in Canada to New York, Philadelphia, Albany, etc. Advance.
Sup. 10 E 1872	Sup. 10 C.G. 50	Feb. 15-15	Grain and Grain Products, stations in Canada to points on D.L. & W. Erie and L.V. R.R. Advance.
Sup. 12 E 2402	Sup. 12 C.H. 26	Feb. 15-15	Hay and Straw, stations in Canada to points in New England. Advance.
Sup. 12 E 2538	Sup. 12 V. 40	Feb. 15-15	Class rates, stations in Canada to Trunk Line Territory. Advance.
Sup. 6 E 2748	Sup. 6 V. 50	Feb. 15-15	Class rates, stations in Canada to points on B. & O. R.R. Advance.
Sup. 1 E 2989	Sup. 1 V. 61	Feb. 15-15	Class rates, stations in Canada to points in Trunk Line Territory. Advance.
Sup. 2 E 3002	Sup. 2 V. 62	Feb. 15-15	Class rates, G.T. stations to points in U.S. Advance.
Sup. 9 E 2361	Sup. 9 V. 20	Feb. 15-15	Class rates, stations in Canada to points in New York, New Jersey and Pennsylvanian. Advance.
Sup. 6 E 2421	Sup. 6 V. 27	Feb. 15-15	Class rates, stations in Canada to points on Erie R.R. Advance.
Sup. 7 E 2422	Sup. 7 V. 28	Feb. 15-15	Class rates, stations in Canada to points in P. & R. R. R. Advance.
Sup. 6 E 2446	Sup. 6 V. 31	Feb. 15-15	Class rates, G. T. stations to Massena Springs N.Y. and stations east thereof. Advance.
Sup. 12 E 2617	Sup. 12 V. 43	Feb. 15-15	Class rates, stations in Canada to points in New England. Advance.
Sup. 6 E 2601	Sup. 6 V. 42	Feb. 15-15	Class rates, G.T. stations to points on L. V.R.R. Advance.
Sup. 13 E 1858	Sup. 13 C.G. 46	Feb. 15-15	Grain and Grain Products, G.T. stations to New York, Philadelphia and Baltimore. Export. Advance.
E 3057 cancels E 2433	C.A. 97 cancels C.A. 95	Feb. 15-15	Asbestos, C.L., Sherbrooke and Danville, P.Q., to stations in U.S. Advance. Reduction.
E 3058 cancels E 2935	C.V. 74 cancels C.V. 71	Feb. 15-15	Sugar Beets, C.L., G.T. stations to points in U.S. Advance.

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C.R.C.	R.R. No.	Effective.	Descriptions.
Grand Trunk Railway.			
E 3061 cancels E 973	C.L. 55 cancels C.L. 14	Feb. 15-15	Live Stock, Ottawa Div. stations to Black Rock, N.Y. Advance.
E 3062 cancels E 3030	C.O. 92 cancels C.O. 91	Feb. 15-15	Crude and Fuel Oil, C.L. Petrolia to Detroit and Port Huron, Mich. Advance.
E 3067 cancels E 2992	C.L. 56 cancels C.L. 51	Feb. 15-15	Live Stock, G.T. stations to London, Ohio. Advance .
E 3069 cancels E 2994	C.G. 84 cancels C.G. 78	Feb. 15-15	Grain and Grain Products, G.T. stations to points in U.S. Advance.
E 3070 cancels E 2854	C.P. 112 cancels C.P. 106	Feb. 15-15	Paper, C.L., Ottawa to Boston and East Boston. Advance.
E 3071 cancels E 1870 1871 2403	V. 63 cancels V. 13 14 24	Feb. 23-15	Class rates, G.T. stations to points in New York, Pennsylvania and New Jersey via Cobourg. Advance.
E 3072 cancels E 2587	C.P. 113 cancels C.P. 96	Mch. 1-15	Woodpulp, C.L., Pt. Levi Ex. connecting lines to U.S. Advance.
E 3073 cancels E 1976 2486	C.W. 97 cancels C.U. 46 90	Feb. 15-15	Hides and Skins, G. T. stations to points in U.S. Advance.
E 3075 cancels E 3020	C.F. 279 cancels C.F. 276	Feb. 15-15	Cordwood, Slabs, etc., G. T. station to points in U.S. Advance.
E 3076 cancels E 2444	C.H. 38 cancels C.H. 28	Feb. 15-15	Hay and Straw, C.L., G.T. stations to Portland, Me., and intermediate U.S. points. Advance .
E 3077 cancels E 2669	C.S. 20 cancels C.S. 17	Feb. 15-15	Maple Sugar, C.L., Pt. Levi and Quebec to points in U.S. Advance.
E 3078 cancels E 2749	C.P. 114 cancels C.P. 98	Mch. 1-15	Woodpulp, C.L., Pt. Levi P.Q., to points in U.S. Advance.
E 3088 cancels E 1985 3004 3045 3053 3054	E. 55 cancels E. 37 44 50 51 52	Feb. 15-15	Class and Commodity. Export rates, stations in Canada to Boston, Portland, St. John and Halifax. Advance. Reduction.
E 3082 cancels E 3025	C.F. 280 cancels C.F. 275	Feb. 15-15	Bark, C.L., Powassan to Detroit. Advance.
E 3084 cancels E 2984 E 2996 E 3016	C.U. 99 cancels C.U. 88 C.U. 93 C.U. 95	Feb. 15-15	Commodities, station in Canada to points in U.S. Advance.
E 3085 cancels E 2752	C.P. 115 cancels C.P. 90	Mch. 1-15	Woodpulp, C.L., Sherbrooke to U.S. points. Advance.
E 3087 cancels E 2284	C.P. 116 cancels C.P. 78	Mch. 1-15	Woodpulp, C.L., Campbellford, Ont., to U.S. points. Advance.
E 3089 cancels E 2379	E. 56 cancels E. 40	Feb. 15-15	Class and commodities to New York, Philadelphia and Baltimore for export. Advance.
E 3090 cancels E 2990	C.P. 117 cancels C.P. 111	Feb. 15-15	Paper, C.L. stations in Canada to points in U.S. Advance.
E 3091 cancels E 2646	E. 57 cancels E. 43	Feb. 15-15	Class and commodities, G.T. stations to Boston, Portland, etc., for export. Advance.
E 3092 cancels E 1606	E. 53 cancels E. 31	Feb. 15-15	Quebec to Portland, class rates for export. Advance.
E 3096 cancels T 2946	C.P. 120 cancels C.P. 107	Mch. 1-15	Woodpulp, C.L., Hawkesbury and Ottawa to U.S. stations. Advance.
E 3098 cancels E 2426	V. 64 cancels V. 29	Feb. 15-15	Class rates, G.T. stations in Quebec to New York and Brooklyn, N.Y. Advance.
E 3099 cancels E 2443	C.H. 39 cancels C.H. 27	Feb. 17-15	Hay and Straw, C.L., G.T. stations to points in New England. Advance .
E 3100 cancels E 2919	C.K. 264 cancels C.K. 251	Feb. 19-15	Wheat, Corn and Oats, Midland and Tiffin, Ont., to Boston and Boston points, to be milled at Peterboro. Advance.
W 387 cancels W 354	202 E cancels 202 D	Feb. 6-15	Class and commodity rates, stations Detroit and West to points in Canada. Advance.
New York Central Railroad.			
37	81	Feb. 23-15	Iron and steel articles, Buffalo, Black Rock, etc., to Ottawa. Advance.
41	87	Feb. 23-15	Class rates, N.Y.C. stations to points in O. M. & S. R.. Advance.
42	88	Feb. 23-15	Class rates, N.Y.C. stations to points on C. P.R. Advance.
43	89	Feb. 23-15	Class rates, N.Y.C. stations to points on G. T.R. Advance.
62	118	Feb. 23-15	Pig iron, C.L., Buffalo, Black Rock, etc., to Cornwall and Ottawa. Advance.
86	183	Feb. 23-15	Iron and steel articles, Niagara Falls, North Tonawanda, etc., to points in Canada. Advance.
90	187	Feb. 23-15	Bleach and soda, Depew, Niagara Falls, N.Y., etc., to Toronto. Advance.
94	197	Feb. 23-15	Iron pumps, Seneca Falls, N.Y., to Montreal. Advance.
29	49	Feb. 15-15	Class and commodity rates, N.Y.C. stations to points in Ontario. Advance.
212	400	Feb. 23-15	Cast iron pipe and fittings, Medina, N.Y., to Montreal. Advance.
214	403	Feb. 23-15	Commodities, New York to Montreal. Advance.
246	466	Feb. 23-15	Carbonic acid gas, Albany, N.Y., to Montreal. Advance.
300	560	Feb. 23-15	Pig iron, C.L., Buffalo, North Tonawanda, etc., to Sherbrooke and Three Rivers, P. Q. Advance.
322	590	Feb. 23-15	Steel bars, C.L., North Tonawanda to Smith's Falls, Ont. Advance.
336	603	Feb. 23-15	Class rates, N.Y.C. stations to points on G. T.R. Advance.
336	610	Feb. 23-15	Automobiles, Syracuse, N.Y., to Ottawa. Advance.



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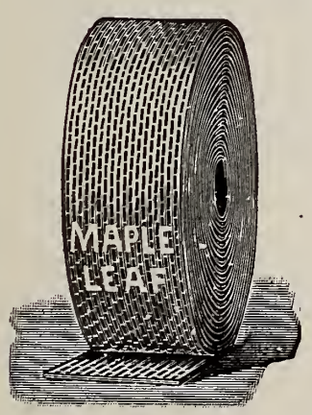
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"Maple Leaf" Brand Stitched Cotton Duck Belting

The best on the market for TRANSMISSION OF POWER. CONVEYING, etc.

DOMINION BELTING CO. Limited
Hamilton, Canada

C.R.C.	R.R. No.	Effective.	Descriptions.
New York Central Railroad.			
155	308	Feb. 23-15	Scrap copper, Montreal to Newark, N.J. Advance.
Sup. 6 2446	Sup. 6 A 24112	Feb. 23-15	Class rates, N.Y.C. stations to points on G. T.R. Advance.
12	31	Feb. 15-15	Bleach and soda, C.L., Echota and Niagara Falls, N.Y., to points in Canada. Advance.
13	32	Feb. 15-15	Soda, Syracuse, N.Y., to Kingston. Advance.
33	53	Feb. 15-15	Commodity rates, N.Y. C. stations in U.S. to points in Canada. Advance.
34	154	Feb. 15-15	Class rates, N.Y.C. stations in U.S. to points on G.T.R. Advance.
127	263	Feb. 23-15	Moulding sand, C.L., stations in N.Y. State to Ottawa. Advance.
130	266	Feb. 23-15	Clay conduits, Rochester to Montreal. Advance.
133	271	Feb. 23-15	Cast iron pipe, C.L., stations in N.Y. State to points on O. & N. Y. Ry. Advance.
138	284	Feb. 23-15	Soda, Syracuse to points in Canada. Advance.
139	286	Feb. 23-15	Soda, Syracuse, N. Y., to Montreal. Advance.
153	305	Feb. 23-15	Commodities, New York to points on N.Y.C. in Quebec. Advance.
157	310	Feb. 23-15	Pig iron, No. Tonowanda, N.Y., to points in Canada. Advance.
160	315	Feb. 23-15	Binder twine, Auburn to points in Canada. Advance.
172	339	Feb. 23-15	Pig iron, C.L., Buffalo, Black Rock, etc., to Montreal. Advance.
189	369	Feb. 23-15	Steel plates, sheet steel and bar iron, Lockport, N.Y., to Montreal. Advance.
190	370	Feb. 23-15	Iron and steel articles, Black Rock, Buffalo, etc., to Quebec. Advance.
197	379	Feb. 23-15	Agricultural implements, Auburn, N.Y., to points on G.T.R. Advance.
Sup. 23 2588	Sup. 23 A 25000	Feb. 5-15	Class rates, N. Y. C. points to stations in Canada; also O. & N. Y. points to stations in U.S. Advance.
103 cancels 2210	222 cancels A 21839	Feb. 23-15	Boilers and engines, Oswego to Montreal. Advance.
105 cancels 1373	225 cancels A 13349	Feb. 23-15	Carbide of calcium, Niagara Falls, N.Y., to St. John, N.B. Advance.
108 cancels 1796	228 cancels A 18707	Feb. 23-15	Class rates, Ogdensburg and Norwood, N.Y., to Montreal. Advance.
110	232	Feb. 23-15	Petroleum and products, Albany to Quebec. Advance.
111	233	Feb. 23-15	Paper commodities, Carthage, N.Y., to Quebec. Advance.

C.R.C.	R.R. No.	Effective.	Descriptions.
New York Central Railroad.			
112-234		Feb. 23-15	Steel bars, C.L., North Tonawanda to Smith's Falls. Advance.
121-255		Feb. 23-15	Import rates, New York to points in Ontario. Advance.
Sup. 15 1498	Sup. 15 A 14801	Feb. 23-15	Class rates between stations on N.Y.C. and W.S.R.R. in U.S. and stations on N.Y.C. in Canada. Advance.
Sup. 7 2626	Sup. 7 A 25320	Feb. 23-15	Class rates, Montreal to stations on N.Y.C. and W.S. Railroads. Advance.
Canadian Northern Railway.			
E 585 cancels E 10	E 658 cancels E 10	Feb. 15-15	Class rates, C. N. stations to Brooklyn and New York. Advance.
E 587 cancels E 562	E 660 E 631	Feb. 15-15	Class rates, C. N. stations (Quebec Div.), to points on N.Y.C. and W. Railroads. Advance.
E 586 cancels 337	E 661 cancels E 193	Feb. 15-15	Class and commodity rates, C. N. stations east of Ottawa to Boston, Mass. Advance.
E 591 cancels E 590	E 664 E 663	Feb. 18-15	Class rates, C. N. stations in Ontario to St. John and Halifax for export. Advance.
E 589 cancels E 480 E 497 E 571	E 662 cancels E 555 E 565 E 642	Feb. 15-15	Class and commodity rates, C. N. stations to New York, Boston, Portland, St. John and Halifax for export. Advance.
E 582 cancels E 47	E 655 cancels E 48	Feb. 15-15	Hay and straw, C.L., C. N. stations to U. S.. points. Advance.
Sup. 1 E 516	Sup. 1 E 584	Feb. 15-15	Class rates, C. N. stations in Quebec to points in U.S. Advance.
Sup. 23 E 219	Sup. 23 E 261	Feb. 15-15	Paper commodities, stations in Quebec to Halifax and St. John for export. Advance.
Sup. 7 E. 243	Sup. 7 E 286	Feb. 15-15	Class rates, C. N. stations to points in U.S. Advance.
Sup. 9 E 245	Sup. 9 E 288	Feb. 15-15	Class rates, C. N. stations to points in U.S. Advance.
Sup. 6 E 270	Sup. 6 E 317	Feb. 15-15	Class rates, C. N. stations to points in U.S. Advance.
E 583 cancels E 170 457 478 515	E 656 cancels E 197 517 543 583	Feb. 15-15	Newsprint paper, C.L., C.N. stations to points in U.S. Advance.
Chesapeake and Ohio Railroad.			
37 cancels 27	2000 E cancels 2000 D	Feb. 22-15	Class and commodity rates, C. & O. stations to Canada. Advance.
Chicago, Burlington & Quincey Railroad.			
327 cancels 305	2925 C cancels 2925 E	Feb. 16-15	Class and commodity rates, C., B. & Q. stations to Canada. Advance.
Lehigh Valley Railway.			
1255 cancels 1152 1155		Feb. 23-15	Commodities, L. V. stations to points in Canada. Advance.
Sup. 11 1145		Feb. 23-15	Class rates, L. V. stations to points on G. T.Ry. Advance.
Erie Railroad.			
440 cancels 243		Feb. 23-15	Class rates, Erie stations to points on G. T.R. Advance.
Sup. 28 302	Sup. 28 B 2900	Feb. 23-15	Basis of rates, Erie stations to points in Canada. Advance.
480	B 5937	Feb. 23-15	Raw sugar, C.L., Jersey City and Weehawken, N.J., to Montreal. Advance.
Sup. 36 306	Sup. 36 B 2050	Feb. 23-15	Commodities, Erie stations to points in Ontario. Advance.
187 cancels 164		Feb. 23-15	Articles of iron and steel, Erie stations to points in Canada. Advance.
174 cancels 134	28 B cancels 28	Feb. 6-15	Class and commodity rates, D., L. & W. stations to points in Canada. Advance.
469 cancels 418		Feb. 23-15	Fibre conduits, Orangeburg, N.Y., to Montreal. Advance.
450 cancels 412		Feb. 23-15	Petroleum and products, Erie stations to points in Canada. Advance.
449 cancels 324		Feb. 23-15	Iron and steel articles, North Tonawanda, N. Y., to points in Canada. Advance.
442 cancels 327		Feb. 23-15	Class rates, Erie R. R. stations to points in Canada.
Baltimore and Ohio Railroad.			
Sup. 2 1385		Feb. 23-15	Commodities, B. & O. stations to points in Canada. Advance.
Sup. 8 1128		Feb. 23-15	Class rates, B. & O. stations to Montreal, via C.P.R. Advance.
Sup. 7 1111		Feb. 23-15	Class rates, B. & O., stations to P.M. stations in Ontario. Advance.
Sup. 7 1112		Feb. 23-15	Class rates, B. & O. stations to G.T. points, Montreal and West. Advance.
Sup. 9 1115		Feb. 23-15	Class rates, B. & O. stations to P.M. points in Ontario. Advance.
1436 cancels 1365		Feb. 23-15	Raw sugar, Philadelphia and Baltimore, import to Wallaceburg, Ont. Advance.
1438 cancels 1406		Mch. 8-15	Commodities, B. & O. stations to G. T. points. Advance.
1385 cancels 1040		Feb. 15-15	Commodities, B. & O. stations to points in Canada. Advance.
1383 cancels 1025		Feb. 15-15	Castings, B. & O. stations to Bridgeburg, Ont. Advance.
1380 cancels 967		Feb. 15-15	Manganese ore, C.L., Philadelphia and Baltimore to Toronto. Advance.

C.R C.	R.R. No.	Effective	Descriptions.
Baltimore and Ohio Railroad.			
Sup. 5 1112		Feb. 15-15	Class rates, B. & O. stations to G.T. points. Advance.
Sup. 6 1113		Feb. 15-15	Class rates to stations in Canada. Advance.
Sup. 9 2736		Feb. 6-15	Class rates to stations in Canada. Advance.
Sup. 5 1114		Feb. 15-15	Class rates to stations in Canada. Advance.
Sup. 21 1110		Feb. 6-15	Iron and steel, B. & O. stations to points in Canada. Advance.
Philadelphia & Reading Railway.			
Sup. 34 J 420		Feb. 23-15	Basis for class rates to points in Canada. Advance.
Sup. 8 J 343		Feb. 23-15	Class rates to points on G.T.R. Advance.
Sup. 12 J 374		Feb. 23-15	Class rates to points on C.P.R. Advance.
Sup. 9 J 391		Feb. 23-15	Class rates to points on C.N.R. Advance.
Sup. 11 J 308		Feb. 23-15	Class rates to points on C.P.R. Advance.
J 567 cancels J 530		Feb. 23-15	Iron and steel, P. & R. stations to C. P. R. points. Advance.
J 563 cancels J 465 J 530		Feb. 23-15	Commodities, P. & R. stations to points on C.P.R. Advance.
Sup. 2 J 543		Feb. 23-15	Commodity rates, P. & R. stations to points in Canada. Advance.

C.R.C.	R.R. No.	Effective.	Descriptions.
Bessemer & Lake Erie Railroad.			
166 cancels 159		Feb. 23-15	Iron and steel to points in Canada. Advance.
Western Maryland Railway.			
127 cancels 73		Feb. 23-15	Machinery, York, Pa., to points in Canada. Advance.
Sup. 25 79		Feb. 23-15	Class rates to points in Canada. Advance.
139 cancels 31		Feb. 23-15	Class rates, York, Pa., to Montreal. Advance.
137 cancels 65		Feb. 23-15	Machinery, York, Pa., to Toronto, Ont. Advance.
136 cancels 66		Feb. 23-15	Mill machinery, C.L., Hagerstown Jct., Md., to Toronto. Advance.
133 cancels 116		Feb. 23-15	Class rates, Baltimore and Cumberland, Md., to Canadian points. Advance.
140 cancels 74		Feb. 23-15	Iron and steel to points in Canada. Advance.
New York, Chicago & St. Louis.			
242 cancels 224	276 D cancels 276 C	Feb. 6-15	Iron and steel, N. Y. C. & St. L. stations to points in Canada. Advance.
240 cancels 221	206 C cancels 206 B	Feb. 6-15	Class rates to points in Canada. Advance.

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TORONTO
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C.R.C.	R.R. No.	Effective.	Descriptions.
Lake Erie & Western Railroad.			
141 cancels 156	79 A cancels 203 A	Feb.16	Class rates, L. E. & W. stations to points in Canada. Advance.
Cleveland, Cincinnati, Chicago & St. Louis Railway.			
391 cancels 377	811 K cancels 811 J	Feb. 6-15	Class and commodity rates to points in Canada. Advance.
Sup. 5 359	Sup. 7 525 C	Feb. 6-15	Commodities to points in Canada. Advance.
Pennsylvania Railroad.			
Sup. 8 GO 554		Feb. 5-15	Class to C. P. points. Advance.
Sup. 9 GO 554		Feb. 15-15	Class to C. P. points. Advance.
Sup. 5 GO 404		Feb. 6-15	Class to C. P. points. Advance.
Sup. 6 GO 404		Feb. 15-15	Class to C. P. points. Advance.
GO 907 cancels GO 587		Feb. 15-15	Class to C. P. points. Advance.
GO 910 cancels GO 299		Feb. 15-15	Class to C. P. points. Advance.
GO 945 cancels GO 840		Feb. 23-15	Class rates, P.R.R. stations to points on G. T. Advance.
GO 893 cancels GO 310		Feb. 23-15	Class rates, P.R.R. stations to points on G. T. Advance.
Sup. 5 GO 308		Feb. 15-15	Class rates, P.R.R. stations to points on G. T. Advance.
Sup. 10 GO 542		Feb. 5-15	Class rates, P.R.R. stations to points on G. T. Advance.
Sup. 11 GO 542		Feb. 15-15	Class rates, P.R.R. stations to points on G. T. Advance.
GO1029 GO 858		Feb. 23-15	Class rates, P.R.R. stations to Bridgeburg, Fort Erie and Niagara Falls, Ont. Advance.
GO1006 cancels GO 841		Feb. 23-15	Class rates, P.R.R. stations to M.C. points in Ontario. Advance.
GO 942 cancels GO 543		Feb. 15-15	Class rates to points in Essex Ter. and G.T. Railways. Advance.
GO 916 cancels GO 509		Feb. 15-15	Class rates to points on C. W. & L. E. Ry. Advance.
GO 908 cancels GO 192		Feb. 15-15	Class rates to points on G. P. & H. Ry. Advance.
GO 895 cancels GO 573		Feb. 23-15	Class rates, P.R.R. stations to Montreal. Advance.
GO 886 cancels GO 849		Feb. 15-15	Class rates, Erie and Ridgeway, Pa., to Canadian points. Advance.
Sup. 38 GO 355		Feb. 23-15	Basis of rates to Canadian points. Advance.
GO1013 cancels GO 588 788		Feb. 23-15	Iron and steel articles, P.R.R. stations to Montreal, via G.T.R. Advance.
GO1001 cancels GO 270		Feb. 23-15	Iron and steel articles, P. R. R. stations to points on N. P. Jct. and Q. M. & S. Railways. Advance.
GO1000 cancels GO 563		Feb. 23-15	Iron and steel, P. R. R. stations to Montreal. Advance.
GO 961 cancels GO 600		Feb. 23-15	Iron and steel, P. R. R. stations to Montreal. Advance.
GO 960 cancels GO 562		Feb. 23-15	Iron and steel, P. R. R. stations to G. T. points. Advance.
GO 969 cancels GO 561		Feb. 23-15	Iron and steel, P. R. R. stations to Ottawa and Renfrew. Advance.
GO 956 cancels GO 852		Feb. 23-15	Rough iron forgings, Titusville, Pa., to points in Canada. Advance.
GO 961 cancels GO 560		Feb. 23-15	Machinery, C.L., P.R.R. stations to G.T. points. Advance.
GO 894 cancels GO 531		Feb. 15-15	Skelp (iron or steel), P.R.R. stations to Guelph. Advance.
GO 938 cancels GO 822		Feb. 15-15	Skelp iron, P.R.R. stations to Guelph. Advance.
GO 937 cancels GO 821		Feb. 15-15	Skelp iron, P.R.R. stations to Guelph and Welland. Advance.
GO 964 cancels GO 868		Feb. 23-15	Glass bottles, C.L., Millville, N.J., to Montreal. Advance.
GO 889 cancels GO 421		Feb. 15-15	Brass and copper rods, C.L., Perth Amboy, N.J., to Hamilton, Ont. Advance.
GO1030 cancels GO 113		Feb. 23-15	Paint, C.L., Lucaston, N.J., to Montreal. Advance.
GO 914 cancels GO 26		Feb. 15-15	Paint, C.L., Lucaston, N.J., to G.T. points. Advanec.
GO 924 GO 69 GO 73		Feb. 15-15	Commodity rates, P.R. R. stations to points in Canada. Advance.
GO 925 cancels GO 520		Feb. 15-15	Commodity rates, P.R. R. stations to points in Canada. Advance.
GO 923 cancels GO 521		Feb. 15-15	Commodity rates, P.R. R. stations to points in Canada. Advance.
GO1051 cancels GO 924		Feb. 23-15	Commodity rates, P.R. R. stations to points in Canada. Advance.
GO1048 cancels GO 871		Feb. 23-15	Import commodities, P. R.R. stations to points in Canada. Advance.
GO1060 cancels GO 879		Feb. 23-15	Import commodities, P. R.R. stations to points in Canada. Advance.
GO1011 cancels GO 381		Feb. 23-15	Iron and steel, P.R.R. stations to G. T. points. Advance .
GO1022 cancels GO 850		Feb. 23-15	Pig iron, Erie, Pa., to Canadian points. Advance.

Mr. Thomas Adams

of the Conservation Commission at Ottawa—in his recent address to the Canadian Club at Montreal, said:

"....The Municipal Problems of Canada are largely engineering problems—questions of better industrial buildings—better sanitation—better homes. And before we can have these we must have the right plans...."

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C.R.C.	R.R. No.	Effective.	Descriptions.
Buffalo, Rochester & Pittsburg Railway.			
819 cancels 787	A 2355 cancels A 2159	Feb. 23-15	Iron and steel articles, B., R. & P. stations to points in Canada. Advance.
Sup. 15 551	Sup. 15 A 936	Feb. 23-15	Iron and steel articles, B., R. & P. stations to points in Canada. Advance.
Sup. 6 444	Sup. 6 A 824	Feb. 23-15	Class rates, B., R. & P. stations to points in Canada. Advance.
Sup. 10 172	Sup. 10 A 468	Feb. 23-15	Class rates, B., R. & P. stations to points on G.T.R. Advance.
Sup. 7 295	Sup. 7 A 602	Feb. 23-15	Class rates, B., R. & P. stations to points in Canada. Advance.
Sup. 13 551	Sup. 13. A 936	Feb. 15-15	Iron and steel articles, B., R. & P. stations to points in Ontario. Advance.
791 cancels 621	A 2183 cancels A 1288	Feb. 15-15	Class rates, Rochester, Charlotte and Uptonville to Toronto, via Genesee Dock. Advance.
838 cancels 582 583 599 607 612	A 2428 cancels A 1072 1197 1234 1260 1129	Feb. 23-15	Iron and steel articles, Buffalo to points in Canada. Advance.
830 cancels 788	A 2400 cancels A 2162	Feb. 23-15	Iron and steel articles, B., R. & P. points to stations in Canada. Advance.
Boston & Albany Railway.			
395 cancels 361	7052 cancels 6773	Feb. 23-15	Import class rates, Boston to Ottawa. Advance.
393 cancels 235	7050 cancels 5307	Feb. 23-15	Import class rates, Boston to Montreal. Advance.
386 cancels 295	7005 cancels 6073	Feb. 23-15	Imported bagging, C.L., Boston to Montreal. Advance.
385 cancels 289	7001 cancels 6001	Feb. 23-15	Coal tar and pitch, C. L., B. & A. points to Montreal. Advance.
377 cancels 212	6922 cancels 5166	Feb. 23-15	Imported nitrate of soda C.L., Boston to Montreal. Advance.
390 cancels 306	7010 cancels 6115	Feb. 15-15	Commodities, B. & A. points to stations in Canada. Advance.
Sup. 16 304	Sup. 16 6105	Feb. 15-15	Class rates, B. & A. points to stations in Canada. Advance.
Central Railroad of New Jersey.			
Sup. 15 407		Feb. 23-15	Class rates, C.R.R. of N.J. stations to points on C.P.R. Advance.
Sup. 29 652		Feb. 23-15	Commodities, C.R.R. of N.J. stations to points in Ontario. Advance.
Sup. 3 427		Feb. 23-15	Commodities, C.R.R. of N.J. stations to points on G.T.R. Advance.
Sup. 19 632		Feb. 23-15	Import traffic, New York to points in Ontario. Advance.
Sup. 26 623		Feb. 23-15	Class rates, C.R.R. of N. J. stations to points in Ontario. Advance.
Sup. 9 525		Feb. 23-15	Class rates, C.R.R. of N. J. stations to points on Canadian Northern Ry. Advance.
Sup. 14 492		Feb. 23-15	Class Rates, C.R.R. of N. J. stations to points on Grant Trunk Ry. Advance.
Sup 10 415		Feb. 23-15	Class rates to points on C.P.R. Advance.
900 cancels 687		Feb. 23-15	Iron and steel, C.R.R. of N.J. stations to points on G.T.Ry. Advance.
869 cancels 802		Feb. 23-15	Iron and steel, C.R.R. of N.J. stations to points on C.P.R. Advance.
858 cancels 507		Feb. 23-15	Nails, rods and wire iron or steel, C.R.R. of N.J. stations to points on G.T.R. Advance.
845 cancels 520		Feb. 23-15	Copper wire and rods, C.R.R. of N.J. stations to points on G.T.R. Advance.
835 cancels 548		Feb. 23-15	Cast iron pipe, C.L., C. R.R. of N.J. stations to Ottawa, Valleyfield and Island Pond. Advance.
833 cancels 513		Feb. 23-15	Sulphate of soda, C.L., C.R.R. of N.J. stations to Convent and Lachine, P.Q. Advance.
Delaware, Lackawanna & Western Railroad.			
1019 cancels 585	A 1676 cancels A 1042	Feb. 15-15	Class rates, D. L. & W. stations to stations on G.T.R. Advance.
Sup. 28 645	Sup. 28 C 7860	Feb. 15-15	Commodities, D. L. & W. stations to points in Canada. Advance.
Sup. 20 700	Sup. 20 A 1200	Feb. 15-15	Class rates, D. L. & W. stations to points in Ontario. Advance.
1056 cancels 850	C10810 cancels C 8413	Feb. 23-15	Car bolsters, iron or steel, C.L., Depew, N. Y., to Welland, Ont. Advance.
1047 cancels 715	C10640 cancels C 8299	Feb. 23-15	Iron and steel, D., L. & W. stations to Montreal. Advance.
1046 cancels 666	C10617 cancels C 8069	Feb. 23-15	Slicate of soda, C.L., Harrison and Newark, N.J., to Dechene and Ottawa. Advance.
Sup. 31 646	Sup. 31 C 7860	Feb. 23-15	Commodities, D., L. & W. stations to points in Ontario. Advance.
Sup. 22 700	Sup. 22 A 1200	Feb. 23-15	Class rates, D., L. & W. stations to points in Ontario. Advance.

FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of February, 1915

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

C.R.C.	R.R. No.	Effective.	Description.
Canadian Pacific Railway.			
Sup. 24 W 1969	Sup. 24 W 3235	Feb. 8-15	Commodities between C.P. Western line stations. New rates.
Sup. 21 W 1969	Sup. 21 W 3235	Various dates.	Commodities between C.P. Western line stations. New rates.
Sup. 34 W 1615	Sup. 34 W 2443	Jan. 11, 1915.	Lumber, shingles, etc., Coast and interior mills to points in Eastern Canada. New rates.
Sup. 18 W 1973	Sup. 18 W 3240	Jan. 4-15	Class and commodity rates between Vancouver, Westminster, Victoria and C.P. Western line stations. Advance. Reduction. New rates.
Sup. 15 W 1953	Sup. 15 W 3215	Jan. 11-15	Class and commodity rates between Port Arthur, Fort William and Westfort and stations west. New rates.
Sup. 35	Sup. 35	Jan. 8-15	Lumber, shingles, etc., Coast and interior mills to points in Eastern Canada. New rates.
Sup. 42 W 1806	Sup. 42 W 2866	Jan. 8-15	Lumber, shingles, etc., Coast and interior mills to points on C.P., C.N. and G.T.P. railways. New rates.
Sup. 18 W 1973	Sup. 18 W 3240	Jan. 4-115	Class and commodity rates between Vancouver, Victoria, New Westminster & points east. Advance. Reduction.
Sup. 36 W 1615	Sup. 36 W 2433	Jan. 18-15	Lumber, shingles, etc., Coast and interior mills to points in Eastern Canada. Advance. New rates.
Sup. 43 W 1806	Sup. 43 W 2866	Feb. 14-15	Lumber, shingles, etc., Coast and interior mills to points on C.P., C.N. and G.T.P. railways. Advance.
Sup. 22 W 1969	Sup. 22. W 3235	Various dates.	Commodities between C.P. Western line stations. New rates.
Sup. 17 W 1856	Sup. 17 W 2972	Various dates.	Import tariff, Oriental ports to overland points in Canada. Advance. New rates.
Sup. 22 W 1919	Sup. 22 W 3111	Feb 1-15	Switching and interswitching at C.P. and E. & N. stations. Reductions.
Sup. 11 W 1827	Sup. 11 W 2907	Feb. 18-15	Commodities, stations on C.P., C.N., and G.T.P. railways to points in U. S. Reductions.
Sup. 28 W 1969	Sup. 28 W 3235	Various dates.	Commodities between Western line stations. Reissue. New rates.
Sup. 9 W 1885	Sup. 9 W 3045	Various dates.	Commodities C.P., C.N., and E. & N. stations to Montreal, Quebec, St. John and Halifax, for export. Reissue. Cancellation.
Sup. 44 W 1806	Sup. 44 W 2866	March 1-15	Lumber, shingles, etc., Coast and interior mills to points on C.P., C.N. and G.T.P. railways. Advance.
Sup. 35 E 2529	Sup. 35 E 2133	Feb. 9-15	Commodities C.P. stations to points in U.S Reduction.
Sup. 19 E 2643	Sup. 19 E 2259	Jan. 12-15	Pig iron, C.L., between C.P. points. Reduction.
E 3068	E 2563	Jan. 15-15	Metal form and moulds for concrete construction, Toronto to Winnipeg, Man., 56½c per 100 lbs. New rate.
Sup. 22 E 2189	Sup. 22 E 1785	Jan. 14-15	Commodities C.P. stations to St. John, W. St. John and Halifax. Reduction.
E 2926	E 2109	Jan. 4-15 (R) Feb. 2-15 (A)	Steel bars, C.L., to Vancouver and Victoria from Hamilton, Sydney, N.S., and Trenton, N.S. Advance
Sup. 23 E 2189	Sup. 23 E 1785	Jan. 25-15	Commodities between C.P. stations and to and from connecting lines. Reduction.
Sup. 2 E 2919	Sup. 2 E 2552	Feb. 1-15 R) Mch. 4-15 (A)	Commodities between C.P. stations and to points in Maritime Provinces. Advance. Reduction.
Grand Trunk Railway.			
Sup. 19 E 2379	Sup. 19 E 40	Jan. 12-15	Class and commodity rates to New York, Philadelphia and Baltimore for export. Reduction.
E 3054	E 52	Jan. 12-15	Aluminum canteens, Hamilton and Toronto to Boston and Portland, for export. Reduction.
E 3053	E 51	Jan. 12-15	Iron pipe, C.L., Welland to Portland and St. John, for export. Reduction.
E 3023 cancels E 2914	C. I. 162 cancels C. I. 150	Jan. 23-15	Iron and steel commodities, St. Paul, Dominion and Lachine, P.Q., to I.C.R. stations. Reissue.
Sup. 3 E 3035	Sup. 3 C. Y. 36	Mch. 4-15	Commodities between G.T. stations. Advance. Reduction.
Sup. 61 E 150	Sup. 61 G.B. 75	Feb. 1-15	Iron commodities, between G.T. stations. Reduction.
Sup. 26 E 1985	Sup. 26 E 37	Jan. 25-15	Nails, steel bars, wire and wire rods, C.L., Hamilton to St. John, N.B. Export. Reduction.
Baltimore & Ohio Railroad.			
Sup. 20 1110		Feb. 1-15	Billets, pig iron, etc., B. & O. stations to points in Canada. Reduction. Advance.

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Dominion Abrasive Wheel Co., New Toronto, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal, Que.
J. J. McLaughlin, Ltd., Toronto.

AIR WASHERS
*The Canadian Sirocco Co., Windsor, Ont.

ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE
E. L. Drewry, Winnipeg, Man.

ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

ALUMINUM CASTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS
*T. Pringle & Sons, Montreal.

ASBESTOS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEATHING:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.

AUTOMOBILE PARTS
*Dominion Stamping Co., Walkerville, Ont.

AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

AWNINGS
*Smart-Woods, Ltd., Montreal.

AXLES
Canada Forge Co., Ltd., Welland, Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BACON
E. W. Fearman Co.. Ltd., Hamilton, Ont.

BAGS
*Smart-Woods, Ltd., Montreal.

BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal, Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN
*Berry Bros., Ltd., Winnipeg, Man.

BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.

BANK AND OFFICE RAILINGS
*The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS and CAGES:
*Canada Wire and Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS
A. J. Reach Co., Toronto.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.

BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding
*Otterville Mfg. Co, Ltd., Otterville, Ont.
*Smart-Woods, Ltd., Montreal.

BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER
E. L. Drewry, Winnipeg, Man.

BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
*J. L. Goodhue & Co., Danville, P.Q.
*Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Limited.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS
Samuel May & Co., Toronto.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:
*A. C. Leslie & Co., Montreal.

BLANK BOOKS:
*Morton, Philips & Co., Montreal.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford Ont.
*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.

BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS
*Canadian H. W. Johns-Manville Co., Toronto.
Electric Boiler Compound Co., Ltd Guelph, Ont.

BOILERS.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph Ont.
*Jenckes Machine Co., Sherbrooke
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, heating:
*The Goldie & McCullough Co., Ltd. Galt.

BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.

BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:
*The Waterous Engine Works Co. Ltd., Brantford.

BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co. Ltd., Brantford.

BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BOILER STANDS
Anthes Foundry Ltd., Toronto.

BOLSTERS
*Canadian Car & Foundry Co., Ltd. Montreal, Que.

BOLTS:
*The National Acme Mfg Co., Montreal.

BOLTS AND NUTS:
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS
R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)
The George McLagan Furniture Co. Ltd., Stratford, Ont.

BOOKLETS
Stone Limited, Toronto.
R. G. McLean, Toronto.

BOOKS, blank
*The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,
Ames-Holden-McCready, Ltd., Montreal, Que.
J. Leckie Co., Ltd.
The John Ritchie Co., Ltd., Quebec, Que.

BOWLING ALLEYS
Samuel May & Co., Toronto.

BOXES, cellular board:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap
The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden
G. & J. Esplen, Montreal, Que.
Barchard & Co., Ltd., Toronto.

BRAIDS AND TRIMMINGS
The Moulton Mfg. Co., Ltd., Montreal.

BRAKE SHOES
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS
*Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS
*Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.
*The Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS GOODS
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
*Tallman Brass & Metal Co., Hamilton.

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BRASS PLATES
Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS
Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE
Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.
Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

BRICK
National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co.. Ltd., Montreal.

BRINE PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters
Geo. Booth & Son. Toronto.

BROOMS
H. W. Nelson & Co., Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon
Canadian National Carbon Co., Ltd. Toronto.

BUCKET TANKS
*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat
Parmenter & Bulloch Co., Ltd., Gananoque. Ont.

BUILDING
Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed
Standard Clay Products, Ltd.. St. Johns, Que.

BUILDING FELT and PAPER:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co.. Toronto.

BUILDING GRANITE
McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir. Montreal, Que.

BURLAPS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:
*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS, ADVERTISING NOVELTIES, etc.
Rolph & Clark, Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CAMERAS
Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS
Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOES
Peterboro Canoe Co., Ltd.. Peterboro, Ont.

CANS, baking powder, etc.
American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

CANVAS
*Smart-Woods, Ltd., Montreal.

CAPS, cloth
John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE
*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PRODUCTS
Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
Canada Carbide Co., Ltd., Montreal. Que.

CARDBOARD
Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS
Toronto Carpet Mfg Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.
Canada Furniture Mfrs., Ltd.. Woodstock, Ont.

CARRIERS.
*Richard-Wilcox Canadian Co., Limited, London, Ont.

CARRIERS, box and barrel
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.

CARS, industrial:
*Sheldons, Ltd.. Galt.

CARTONS, lithographed
Harris Lithographing Co., Toronto.

CASTINGS:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass and bronze:
*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co. Ltd., Montreal. Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Record Foundry and Machine Co., Moncton, N.B.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd. Winnipeg, Man.

CASTINGS, malleable iron:
*Galt Malleable Iron Co.. Ltd Galt, Ont.
*Pratt & Letchworth Co.. Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS
Grip, Ltd.. Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford. Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS
*The Grasselli Chemical Co., Ltd. Toronto.
*The Nichols Chemical Co., Ltd. Montreal.

CHEMICAL LABORATORY APPARATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd.. Toronto.

CIGARS
Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO
Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel
The Peter Hay Knife Co., Ltd.. Galt, Ont.

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S
*The General Fire Equipment Co.. Ltd., Toronto, Ont.

CLOSET SEATS
*Canadian H. W. Johns-Manville Co.. Toronto.
*Goderich Organ Co., Goderich, Ont.

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia. Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.

COATS
Peerless Overall Co., Rock Island, Que.

COBALT OXIDE
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COCOA AND CHOCOLATE PREPARATIONS
Walter Baker & Co., of Canada, Ltd.. Montreal, Que.

COFFEE
S. H. Ewing & Sons, Montreal, Que.

COFFEE IMPORTERS, Roasters and Manufacturers
C. H. Cochrane & Co., Ottawa, Ont.

COLD DRAWN SCREW STEEL:
*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD DRAWN SHAPES, flats, squares and hexagons:
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS
The Arlington Co., of Canada, Ltd., Toronto.

COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.

COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.

COLLARS AND CUFFS waterproof
Williams, Greene & Rome, Berlin, Ont.

COLORS
Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin Williams Co. of Canada, Ltd., Montreal, Que.

COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERS
Rolph & Clark, Ltd., Toronto.

COMMERCIAL STATIONERY:
*Brown Bros., Ltd., Toronto.
*Morton, Phillips & Co., Montreal.

CONCENTRATORS:
*Jenckes Machine Co., Sherbrooke.

CONCRETE COATINGS, paints, etc.
The Imperial Varnish & Color Co., Ltd., Toronto.

CONDUITS FOR INTERIOR WIRING
*Conduits Company, Ltd., Toronto.

CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Limited, Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTRACTORS' PLANT
The Western Steel & Iron Co., Ltd., Winnipeg, Man.
*M. Beatty & Sons, Ltd., Welland, Ont.

CONVEYORS:
*Dodge Mfg. Co., Ltd.. Toronto.
*Jenckes Machine Co., Sherbrooke.

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COOLING APPARATUS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

COPPER:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS
*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPERWARE AND LANTERNS
Sheet Metal Products Co. of Canada, Ltd., Toronto.

COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

CORKS
S. H. Ewing & Sons, Montreal. Que.

CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORRUGATED BOXES:
*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COUPLERS
*Canadian Steel Foundries, Ltd. Welland, Ont.

COUPLINGS:
*Dodge Mfg. Co., Ltd., Toronto.

CRANKSHAFTS
Canada Forge Co., Ltd., Welland, Ont.

CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Ltd., Montreal, Que.

CREAMERY AND CHEESE FACTOR MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Peterboro, Ont.

CREOSOTED MATERIALS:
*The Dominion Creosoting Co., Ltd. Vancouver, B.C.

CRUSHED STONE
The Hagersville Contracting Co., Ltd., Hagersville, Ont.

CRUSHING ROLLS:
*Jenckes Machine Co., Sherbrooke.

CUES
Samuel May & Co., Toronto.

CUFFS
The Standard Shirt Co., Ltd., Montreal, Que.

CUPOLAS,
*Sheldons, Ltd., Galt.

CUPS, presentation
Standard Silver Co., Toronto.

CUPS, grease and oil
*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR
Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS
Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.
Grip, Ltd., Toronto.

DINING ROOM SUITES
The George McLagan Furniture Co., Limited, Stratford, Ont.

DIES
*Butterfield & Co., Rock Island, P.Q.

DISINFECTING APPARATUS
Spramotor Co., London, Ont.

DOOR HANGERS
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS
Daly & Morin, Montreal. Que.

DREDGES
*M. Beatty & Sons, Ltd., Welland, Ont.

DRESSING, belt
Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS
J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:
*Canadian Billings & Spencer, Ltd., Welland.

DRY CELLS, electric
Canadian Carbon Co., Ltd., Toronto.

DRY COLORS
P. D. Dods & Co., Ltd., Montreal, Que.
The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DRY KILN EQUIPMENT
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.

DYERS AND FINISHERS
R. Parker & Co., Toronto.

DYNAMITE
Canadian Explosives Ltd., Montreal, Que.

DYNAMOS.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN
Galt Knitting Co., Ltd., Galt.

ELECTRIC APPLIANCES.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.
*Packard Electric Co., Ltd., Toronto.

ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto.

ELECTRIC BATTERIES
Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING
Central Press Agency. Toronto.

ELECTRICAL SUPPLIES
*Canadian Westinghouse Co., Ltd. Hamilton.
*Jones & Moore Electric Co., Ltd., Toronto.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto.

ELEVATORS:
*Jenckes Machine Co., Sherbrooke.
Turnbull Elevator Mfg. Co., Toronto.
*The Waterous Engine Works Co., Ltd., Brantford.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co., Ltd., Brantford.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd. Toronto.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.

ELEVATORS, hydraulic and electric
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que

EMERY DRESSERS and STANDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL GUARDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL Safety Flanges
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.

ENGINES
*The Canadian Sirocco Co., Windsor, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
J. & R. Weir, Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
*Sheldons, Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.

ENGINES, gas and gasoline
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Massey-Harris Co., Ltd., Toronto

ENGINES, gasoline tractor plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting
*M. Beatty & Sons, Welland.
*Waterous Engine Works Co., Ltd., Brantford.

ENGINES, steam plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS
Grip, Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.
Rolph & Clark, Ltd., Toronto.
Stone, Limited, Toronto.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate
American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote
American Bank Note Co., Ottawa, Ont.

ENGRAVING:
*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons, Aurora, Ont.

ENVELOPES
Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

EXCELSIOR PADS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR
Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS
Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto.

EXPLOSIVES, high
Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.
J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

FASTENERS, belt
*Sadler & Haworth, Montreal, Que.

FENCES and GATES:
*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire
Banwell Hoxie Wire Fence Co., Hamilton, Ont.
*Canada Wire and Iron Goods Co., Hamilton.

FENCING, wire
The Great West Wire Fence Co., Ltd., Winnipeg, Man.
C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:
*The E. B. Eddy Co., Ltd., Hull.

FILES
Henry Disston & Sons, Ltd., Toronto.
*The Nicholson File Co., Port Hope, Ont.

FIRE DOOR HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:
*Waterous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:
*Canada Wire and Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS
*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.
*Canadian H. W. Johns-Manville Co., Toronto.
*The General Fire Equipment Co. Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford.

FIRE HOSE
*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.
Dunlop Tire and Rubber Goods Co., Limited, Toronto.
*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE-PROOF WINDOWS AND DOORS
*Pedlar People Ltd., Oshawa, Ont.

*For Display Advertisement, See Index, Page 771

FIRE SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FISH. Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King, Ltd., Montreal, Que.

FLAGS
*Smart-Woods, Ltd., Montreal.

FLASHLIGHTS
Canadian Carbon Co., Toronto.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLUE LINERS
Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
*Sheldons, Ltd., Galt.

FORGINGS
Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton.

FORGINGS, DROP
*Dominion Stamping Co., Walkerville, Ont.

FOUNTAIN FRUITS and Juices
J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:
*Dodge Mfg. Co., Ltd., Toronto.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and buttons
J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air
Bedford Stove Co., Bedford, Que.

FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:
*A. C. Leslie & Co., Montreal.

GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
*The Waterous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground
S. F. Bowser & Co., Toronto.

GASOLINE
*The Imperial Oil Co., Ltd., Toronto.

GENERATORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.

GINS
The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd. Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS
A. R. Clarke & Co., Ltd., Toronto

GLUE
Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.

GRATES.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

GRAVITY CARRIERS
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.

GYPSUM, crushed
*Albert Mfg. Co., Hillsborough, N.B.

GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont

HARDWOOD FLOORING
Wilson Bros. Ltd., Collingwood Ont.

HARDWOOD INTERIOR FINISH
Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS TO DETAIL
Wilson Bros., Ltd., Collingwood, Ont.

HARNESS
Lamontagne Ltd., Montreal, Que.

HATS, men's straw
The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt Ont.

HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope
The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS
*The Canadian Sirocco Co., Windsor, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:
*The Goldie & McCullough Co., Ltd., Galt.

HEATING APPLIANCES:
*Sheldons, Ltd., Galt.

HEATING SYSTEMS
Gurney Foundry Co., Ltd., Toronto.

HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
*Smart-Woods, Ltd., Montreal.

HINGES:
*The Steel Co. of Canada, Ltd. Hamilton.

HOISTS
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

HUMIDIFIERS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES
Bawden Machine Co., Ltd., Toronto.

ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

ILLUMINATED SIGNS
Geo. Booth & Son, Toronto.

INCUBATORS & BROODERS
Lee Mfg. Co., Ltd., Pembroke, Ont.

INJECTORS, automatic and autopositive
Penberthy Injector Co, Ltd., Windsor. Ont.

INSULATION, patent seamless cork
*Canadian H. W. Johns-Manville Co., Toronto.
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS
Standard Clay Products, Ltd., St. Johns, Que.

IRON:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar
Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.
*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural
*Canada Wire & Iron Goods Co., Hamilton.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental
*Canada Wire & Iron Goods Co., Hamilton.
The Western Steel & Iron Co., Ltd. Winnipeg. Man.

IRON, LEAD AND PUTTY
A. R. Whittall, Montreal.

JAM, canned goods, etc.
E. D. Smith & Son, Limited.

JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.

JOINTERS:
*Berlin Machine Works, Ltd., Hamilton.

JELLY POWDER
S. H. Ewing & Sons, Montreal. Que.

JEWELRY, enamelled souvenir
Caron Bros., Montreal, Que.

JEWELRY, gold filled
Caron Bros., Montreal, Que.

JOIST HANGERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

KELSEY WARM AIR GENERATOR
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:
*Sheldons. Ltd., Galt.

KINDLING
Standard Fuel Co., Toronto.

KNIFE GRINDERS:
*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:
*Penman's, Ltd., Paris, Ont.

KNIVES
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.

LABELS
Lawson & Jones Ltd., London, Ont.

LABELS, lithographed
Harris Lithographing Co., Toronto.

LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
*Sadler & Haworth, Montreal, Que.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LAGER
E. L. Drewry, Winnipeg, Man.

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LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:
Canadian Billings & Spencer Ltd., Welland.

LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD
* The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto.

LEAD PIPE
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER
The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole
The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather
A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.
Clarke & Clarke, Limited, Toronto.

LEATHER, upper
A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED TIN WARE:
*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Company, Ottawa, Ont.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited Toronto.
Rolph & Clark Ltd., Toronto.

LOCKERS:
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene. Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, decking and planking
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).

LUMBER, Douglas fir (Oregon pine)
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, long timbers and spars
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, pickets and lath
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, staves and heading
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, white pine
Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

MACHINERY, conveying.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.

MACHINERY, elevating.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.

MACHINERY, flour mill:
*The Goldie & McCullough Co., Ltd., Galt.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY, hoisting, etc.
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works, Ltd., Toronto
J. & R. Weir, Montreal, Que
*M. Beatty & Sons, Ltd., Welland, Ont.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, pumping
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing
*John Bertram & Sons Co., Ltd. Dundas, Ont.

MACHINERY, railroad and car shop
*John Bertram & Sons Co., Ltd. Dundas, Ont.

MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene Ont.
W. P. Plant, Hastings, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, special
Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery
W. P. Plant, Hastings, Ont.

MACHINERY, transmission
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.

MACHINERY, wood working
*Berlin Machine Works, Ltd., Hamilton.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:
*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting
Spramotor Co., London, Ont.

MAGNESITE
Canadian Carbonate Co., Ltd., Montreal, Que.

MAILING TUBES:
*Dominion Paper Box Co., Ltd., Toronto.

MALT:
*Hiram Walker & Sons, Ltd., Walkerville.

MANTELS, wood
W. A. Moore Co., Ltd., Meaford Ont.

MAPS AND MAP MOUNTING
The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:
*Berlin Machine Works, Ltd., Hamilton.

MATCHES:
*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned
The Wm. Davies Co., Ltd., Toronto.

MECHANICAL DRAUGHT
*Canadian Sirocco Co., Windsor, Ont.

MEDICINES, patented and pharmaceutical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
Alonzo W. Spooner, Limited, Port Hope, Ont.

METAL CEILING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.

METAL ROOFING
*Pedlar People Ltd., Oshawa, Ont.

METAL, spinning and stamping
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SHINGLES:
*Metal Shingle & Siding Co., Ltd., Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.
*Pedlar People, Ltd., Oshawa, Ont.

METAL SIDING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS
Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)
Holt, Renfrew Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)
Holt, Renfrew, Ltd., Quebec, Que.

MONUMENTS
McIntosh Granite Co., Ltd., Toronto.

MORTISERS:
*Berlin Machine Works, Ltd., Hamilton.

MOTOR CAR PARTS AND ACCESSORIES
*Russell Motor Car Co., Ltd., Toronto.

MOTORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.

MOTORS, D.C.
*Canadian Crocker Wheeler Co., St. Catharines, Ont.

MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:
*The Gramm Motor Truck Co., Ltd., Walkerville.

MOULDERS:
*Berlin Machine Works, Ltd., Hamilton.

NAILS:
*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAME PLATES
Patterson and Heward, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NUTS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

OAKUM, plumbers', Canadian Navy
Factory Waste and Metal Co., Montreal, Que.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.

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OFFICE STATIONERY:
*The Montreal Lithographing Co., Ltd., Montreal.

OILS
Brandram-Henderson, Ltd., Montreal. Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS
S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES
Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring
S. F. Bowser & Co., Toronto.

OIL COMPANIES
Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)
*British American Oil Co., Ltd., Toronto.

OILS, Petroleum
*The Imperial Oil Co., Ltd.. Toronto.

OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

ORGANS
*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe
Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour
Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OSTRICH PLUMES
R. Parker & Co., Toronto.

OVENS, portable bake
Bedford Stove Co., Bedford, Que.

OVERALLS
Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd, Montreal, Que.

OVERCOATINGS
Rosamond Woollen Co., Aimonte, Ont.

OVERHEAD RUNWAYS.
*Richard-Wilcox Canadian Co., Limited, London, Ont

PACKING BOXES
Barchard & Co., Ltd., Toronto.

PACKING, engine:
*Garlock Packing Co., Hamilton.

PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES
A. Muirhead Co., Ltd., Toronto.

PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge
Standard Paint and Varnish Co., Ltd., Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island Que.

PAPER BOARDS
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book
Barber Paper & Coating Mills, Ltd. Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal. Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal Que.

PAPER, envelope
Provincial Paper Mills Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co., Montreal. Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co., Montreal. Que.

PAPERS, building
Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp and Paper Co., Montreal. Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated box board
*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, enamelled blotting
*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, gummed tapes
Gummed Papers, Ltd., Brampton, Ont.

PAPER, label
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, ledger
*Rolland Paper Co., Ltd., Montreal Que.
The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co. Cornwall. Ont.

PAPER, wall
Stauntons. Ltd., Toronto.

PAPER, writing
The Toronto Paper Mfg Co. Cornwall. Ont.

PAPER, writing, high-grade
*Rolland Paper Co., Ltd., Montreal Que.

PAPER, writing, superfine
*Rolland Paper Co., Ltd., Montreal Que.

PAPER BOXES:
*Dominion Paper Box Co., Toronto.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co.. Limited, Stratford, Ont.

PATENTS
Fetherstonhaugh & Co., Toronto.
Ridout and Maybee, Toronto.

PATENT LITIGATION
Ridout and Maybee, Toronto.

PEAS AND BEANS FOR SEED
W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:
*Canada Wire & Iron Goods Co., Hamilton.

PERFORATED MUSIC ROLLS
The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS
Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.
*Gourlay, Winter and Leeming, Toronto.

PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.

PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

PIANOS, player
*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions
The Otto Higel Co.. Ltd. Toronto.

PIANO STOOLS and BENCHES
*Goderich Organ Co., Goderich, Ont.

PICKLES
The Wm. Davies Co.. Ltd., Toronto.

PICKLES AND CATSUPS
T. A. Lytle Co.. Ltd., Toronto.

PIG IRON:
*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS, ETC.
Wilson Bros., Ltd., Collingwood, Ont.

PINS, society, emblems and Badges
Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas
National Iron Works, Ltd.. Toronto.

PIPE COUPLINGS:
*The Steel Co. of Canada, Ltd.. Hamilton.

PIPE COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

PIPES, culvert
Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd.. Montreal, Que.

PIPE, sewer
Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton. Ont.
Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings
Warden King Ltd.. Montreal, Que.

PIPES AND TUBES, wrought merchant
*Page-Hersey Iron. Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off Machines
John H. Hall & Sons, Limited. Brantford, Ont.

PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:
*Berlin Machine Works, Ltd.. Hamilton.

PLANING MILLS
G. & J. Esplen, Montreal, Que.

PLASTER OF PARIS
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, hard wall
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land
*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:
*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS
J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES
The Garth Co.. Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:
Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES
Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain
Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence
Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS
Stone, Limited, Toronto.

POULTRY SUPPLIES AND MEDICINES
Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES AND DIES
Brown Boggs Co., Ltd., Hamilton, Ont.

PRESSES, baling
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic
William R. Perrin & Co., Ltd., Toronto.
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer
William R. Perrin & Co., Ltd., Toronto.

PRINTERS
Rous & Mann, Ltd., Toronto.
R. G. McLean, Toronto.

PRINTERS, catalogue:
R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.

PRODUCE
The Wm. Davies Co., Ltd., Toronto.

PROPRIETARY MEDICINES
Northrop & Lyman Co., Ltd., Toronto.

PROVISIONS
The Wm. Davies Co.. Ltd.. Toronto.

PULLEYS.
*Dodge Mfg. Co.. Ltd.. Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Jeffrey Mfg. Co., Montreal, Que.

*For Display Advertisement See Index, Page 771

PULP. Bleached Sulphite
The Edward Partington Pulp and Paper Co., St. John, N.B.

PULP, Sulphide
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PUMPS.
Spramotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

PUMPS, ammonia
*Bawden Machine Co., Ltd., Toronto.

PUMPS, boiler feed.
*Bawden Machine Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.

PUMPS, centrifugal
*M. Beatty & Sons, Ltd., Welland, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, iron
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, tar
*Bawden Machine Co., Ltd., Toronto.

PUMPS, turbine, and equipment
*Bawden Machine Co., Ltd., Toronto.

PUMPS (Turbine and reciprocating)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

PYJAMAS AND NIGHT ROBES
Williams, Greene & Rome, Berlin, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron:
*Dennis Wire & Iron Works Co., London.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada, Ltd., Montreal, Que.

RAILWAY SUPPLIES.
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

RAILWAY TARIFF BINDERS
The Esdale Press Ltd., Edmonton.

READY-TO-WEAR GARMENTS, Ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

"REDWOOD" lager
E. L. Drewry, Winnipeg, Man.

REED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock, Ont.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions.
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT for concrete:
*Canada Wire & Iron Goods Co., Hamilton.
*Pedlar People Ltd., Oshawa, Ont.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETS:
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd. Hamilton.

RIVETS, bifurcated and tubular
Parmenter & Bulloch Co., Ltd. Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bulloch Co., Ltd. Gananoque, Ont.

ROLLERS, shade
Daly & Morin, Montreal, Que.

ROOFING, metal
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd. Preston.

ROOFING, ready to lay
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd. Montreal, Que.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.
The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.

RUBBER GOODS.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

RYE
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

SADDLERY HARDWARE
*Dominion Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.

SAMPLE CASES
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.

SANDERS:
*Berlin Machine Works, Ltd., Hamilton.

SANDPAPER
Delany and Pettit, Ltd., Toronto, Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
Canadian Salt Co., Ltd., Windsor Ont.

SANITARY PAPER TOWELS:
*E. B. Eddy Co., Ltd., Hull.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt, Ont.

SAWS, band:
*Berlin Machine Works, Ltd. Hamilton.

SAWS, crosscut
*Berlin Machine Works, Ltd., Hamilton.

SAWS, crosscut and band
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack:
*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip:
*Berlin Machine Works, Ltd., Hamilton.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

SAWS, specialties
*Victor Saw Works, Ltd., Hamilton, Ont.

SCALES
The Gurney Scale Co., Hamilton, Ont.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.

SCREENS:
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREWS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SHAFTING.
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.

SHANTY BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS:
*Berlin Machine Works, Ltd., Hamilton.

SHEAR BLADES, iron
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING, asbestos corrugated:
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHEET METAL WARE (iron galvanized and enamelled)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.

SHELLAC
*Berry Bros., Ltd., Winnipeg.

SHINGLES, asbestos cement:
*Canadian H. W. Johns-Manville Co,, Toronto.

SHIRTS
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
Peerless Overall Co., Rock Island, Que.
John W. Peck & Co., Ltd., Montreal, Que.
The Standard Shirt Co., Ltd., Montreal, Que.

SHIRTS, workmen's
A. R. Clarke & Co., Ltd., Toronto

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOES, running and athletic
Ames-Holden-McCready, Ltd., Montreal, Que.

SHOOKS
Barchard & Co., Ltd., Montreal, Que.

SIGNS
Geo. Booth & Son, Toronto.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

SILVERWARE
Toronto Silver Plate Co., Ltd., Toronto.
Standard Silver Co., Toronto.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto.

SINKS, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKATES, figure
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, genuine Acme
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, hockey
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, ice
Canada Cycle & Motor Co., Ltd., Toronto.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS:
*Metallic Roofing Co., Ltd., Toronto.
*Pedlar People Ltd., Oshawa, Ont.

SLEIGHS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

SLIPPERS
Ames-Holden-McCready, Ltd., Montreal, Que.

SOAPS
J. Barsalou & Co., Ltd., Montreal, Que.

SOAP (soft, oil)
The Imperial Varnish & Color Co., Ltd., Toronto.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*The Canada Metal Co., Toronto.

SOLDER, wire and bar
*American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPARK PLUGS
Canadian Carbon Co., Ltd., Toronto.

SPIRAL CONVEYORS.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SPLIT PEAS
H. Murton, Guelph, Ont.

SPIKES, railway and marine
Starr Mfg. Co., Ltd., Dartmouth, N.S.

SPIRITS
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto.

SPRAYERS
Spramotor Co., London, Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal, Que.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriages and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*General Fire Equipment Co., Ltd., Toronto.
*Purdy, Mansell, Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

*For Display Advertisement See Index, Page 771

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Vol. XV., No. 9

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no. 9

APRIL, 1915

$2.00 per Year

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Doesn't this look like Prosperity?

Compare this table of the VALUE of field crops in Canada for the years 1914, 1913 and 1912. Is it a surprise to you to find 1914 better than 1913—better even than the banner year, 1912?

VALUES OF FIELD CROPS IN CANADA, 1912—1914

PROVINCES	1912	1913	1914
Canada	$557,344,100	$552,771,500	$638,580,300
P. E. Island	59,456,000	9,535,500	11,544,000
Nova Scotia	19,420,000	17,132,900	21,969,700
New Brunswick	17,295,700	17,965,100	20,045,100
Quebec	69,901,000	88,589,000	99,279,000
Ontario	198,715,000	167,835,000	196,220,000
Manitoba	71,647,000	64,557,000	65,528,400
Saskatchewan	115,813,000	129,376,000	152,751,500
Alberta	44,503,400	46,712,000	59,779,600
British Columbia	10,593,000	11,069,000	11,463,000

From Dominion of Canada Census and Statistics Monthly for January, 1915

After all, "hard times" are largely a mental condition. It is in the influencing of NATIONAL mental conditions that a modern, well-equipped advertising agency does its best work.

Why not send us a few clippings of your advertisements or copies of your circulars, particulars of your product and its distribution in Canada, and let us figure out a comprehensive advertising and selling plan for your business?

J. J. GIBBONS Limited

AGENTS FOR ADVERTISERS IN CANADA

Established 1898

119 West Wellington Street TORONTO

Branches: MONTREAL, WINNIPEG

PUBLISHED BY THE CANADIAN MANUFACTURERS ASSOCIATION INCORPORATED.

HEAD OFFICE TORONTO · BRANCH OFFICES, MONTREAL, HAMILTON, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC

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The Pratt & Letchworth Company Limited

BRANTFORD ONTARIO

Automobile Parts

Drop Forgings



Sheet Metal Work

General Stampings

Saddle Trees and Saddlery Hardware

WE are now manufacturing these lines for a number of Canadian firms filling war contracts. We are the Pioneers and the largest manufacturers of all steel saddle tree arches in Canada. :: ::

THE DOMINION STAMPING COMPANY
LIMITED
Walkerville, Ont.

QUALITY

"No good man did, or ever should encourage cheapness at the ruinous expense of *unfitness*, which is always infidelity, and is dishonorable to a man. If I want an article let it be genuine, at whatever price; if the price is too high for me, I will go without it, unequipped with it for the present,—I shall not have equipped myself with hypocrisy at any rate. This, if you will reflect, is primarily the rule of all purchasing and producing men."—*Thomas Carlyle.*

WHEN we commenced refining Crude Petroleum at our works, Ashbridge's Bay, Toronto, about seven years ago, we nailed our colors to the mast of QUALITY. That's why our different products have gained such an enviable distinction.

WE MANUFACTURE

GASOLENE	BENZINE	LAMP OILS
FUEL OIL	GAS OIL	PARAFFINE WAX
AUTOMOBILE OILS	GREASES	ASPHALTIC ROAD OILS

LUBRICATING OILS FOR STEAM, MOTOR AND ELECTRIC PLANTS

The BRITISH AMERICAN OIL CO. Limited

REFINERS

BRANCHES
Montreal, Ottawa, London

HEAD OFFICE
Lumsden Building, Toronto

WE MAKE **THAT GOOD OIL!**

STAINS
R. C. Jamieson & Co., Ltd., Montreal, Que.

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPINGS
*Dominion Stamping Co., Ltd., Walkerville, Ont.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMP MILLS:
*Jenckes Machine Co., Sherbrooke.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM PIPE and BOILER COVERINGS, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*M. Beatty & Sons, Ltd., Welland, Ont.

STEAM SPECIALTIES:
*Sheldons, Ltd., Galt.

STEAM TRAPS
*Canadian Sirocco Co., Windsor, Ont.
*Canadian Morehead Manufacturing Co., Limited, Woodstock.

STEEL:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.
*Pedlar People, Ltd., Oshawa, Ont.

STEEL CASTINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Dominion Steel Foundry Co., Ltd., Hamilton.

STEEL PEN STOCKS:
*Jenckes Machine Co., Sherbrooke.

STEEL RODS:
*The Steel Co. of Canada, Ltd., Hamilton.

STEEL SASH:
*Dennis Wire & Iron Works. Co., London.
*Henry Hope & Sons, Ltd., Toronto.

STEEL SHELVING:
*Dennis Wire & Iron Works. Co., London.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING
Central Press Agency, Toronto.

STOOLS AND BENCHES, piano and organ
*Otterville Mfg. Co., Ltd., Otterville, Ont.

STONE
The Corinthian Stone Co., Guelph, Ont.
The Hagersville Contracting Co., Hagersville, Ont.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES
Tudhope-Anderson Co., Ltd., Orillia, Ont.
Bedford Stove Co., Bedford, Que.

STOVE BOARDS
Sheet Metal Products Co. of Canada, Ltd., Toronto.

STOVE LININGS
Standard Clay Products, Ltd., St Johns, Que.

STOVES AND RANGES
Bedford Stove Co., Bedford, Que.
Gurney Foundry Co., Ltd., Toronto.
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont.

STRETCHERS, lace curtain
*Otterville Mfg. Co., Ltd., Otterville, Ont.

STRUCTURAL STEEL
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

SURFACERS:
*Berlin Machine Works, Ltd., Hamilton.

SWITCHBOARDS
*The Canadian Independent Telephone Co., Ltd., Toronto.

SWITCHES, railway
Canadian Ramapo Iron Works, Ltd Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd Montreal, Que.

SWITCH STANDS
*Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

TABLES, billiard
Samuel May & Co., Toronto.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton Ont.

TANKS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
Goold-Shapley-Muir Co., Ltd. Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*The Goldie & McCullough Co. Ltd., Galt.
*The Waterous Engine Works Co. Ltd., Brantford.

TAPS
Pratt and Whitney Co. of Canada, Dundas. Ont.
*Butterfield & Co., Rock Island, P.Q

TAP WRENCHES
*Butterfield & Co., Rock Island, P.Q

TAPES, measuring
The Lufkin Rule Co.. of Canada Ltd., Windsor, Ont.

TAPES, paper and cloth, gummed and ungummed
Gummed Papers, Ltd., Brampton, Ont.

TELEPHONE ACCESSORIES
Canadian Independent Telephone Co., Toronto.

TELEPHONE APPARATUS
*The Canadian Independent Telephone Co., Ltd., Toronto.

TELEPHONES. Automatic
*Canadian Independent Telephone Co., Toronto.

TENTS
Mackenzie & Co., Ottawa, Canada
Turner, J. J., & Sons, Peterborough, Ont.
*Scythes & Co., Ltd., Toronto.

TERRA ALBA
*Albert Mfg. Co., Hillsborough, N.B.

TERRA COTTA (architectural)
Toronto Plate Glass Importing Co., Ltd., Toronto.

THEATRE CURTAINS, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.

THUMB SCREWS:
*Canadian Billings & Spencer, Ltd., Welland.

TILING, interlocking rubber.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TIMBER:
*The B.C. Mills Timber & Trading Co., Vancouver, B.C.
James Sheppard & Son, Sorel. Que

TANNERS' SUPPLIES
McClary Mfg. Co., London, Ont.

TIN WARE (stamped, pierced, japanned and lithographed)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

TIRES, cycle, auto and truck.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TRADE MARKS AND DESIGNS
Ridout & Maybee, Toronto.

TRANSFORMERS
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TRANSFORMERS, power
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TOOLS, sheet metal workers
Brown Boggs Co., Ltd., Hamilton. Ont.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton. Ont.

TRANSMISSION MACHINERY.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

TROLLEYS.
*Richard-Wilcox Canadian Co., Limited, London, Ont.

TRUCKS
The Gurney Scale Co., Hamilton, Ont.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford.

TRUNKS
Lamontagne Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal, Que.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

TUBING, Brass and Copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Canadian Seamless Wire Co., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

TUBING, Gold and Silver
Canadian Seamless Wire Co., Toronto.

TURBINES, water.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TURBINES, steam:
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TURBINE AND RECIPROCATING PUMPS.
*The Bawden Machine Co., Limited, Toronto.

TWEEDS
Rosamond Woollen Co., Almonte, Ont.

TWINES, binder
Brantford Cordage Co., Ltd. Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
Pratt and Whitney Co., of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

UNIONS
*Dart Union Co., Ltd., Toronto, Ont.
*Otterville Mfg. Co., Ltd., Otterville, Ont.

UNDERWEAR TRIMMINGS
The Whitby Braid & Edging Co., Woodstock, Ont.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

VACUUM PUMPS
*The Bawden Machine Co., Limited, Toronto.

VALVES:
*Kerr Engine Co., Ltd., Walkerville.

VALVES, for steam and water
Jenkins Bros., Ltd., Montreal, Que.

VALVES, regrinding globe, angle cross checks, swing checks, etc.
Penberthy Injector Co., Ltd., Windsor, Ont.

VARNISHES
*Ault & Wiborg Co. of Canada, Ltd. Toronto.
Berry Bros., Walkerville, Ont.
*Dougall Varnish Co., Ltd., Montreal.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal.

VAULTS and VAULT DOORS:
*The Goldie & McCullough Co., Ltd., Galt.

VENTILATING APPLIANCES:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

VENTILATING SYSTEMS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
Gurney Foundry Co., Ltd., Toronto.

VENTILATORS:
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.
*Pedlar People, Ltd., Oshawa, Ont.

VINEGAR
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

WAGONS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

WALL COPING
Standard Clay Products, Ltd., St. Johns, Que.

WASHERS:
*The Steel Co. of Canada. Ltd., Hamilton.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTES, wool and cotton
Factory Waste and Metal Co., Montreal, Que.
*Scythes & Co., Ltd., Toronto.

WATER-PROOF CEMENT COATING
Benjamin Moore & Co., Ltd., Toronto.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton. Ont.

WHEELS
*Canadian Car & Foundry Co., Ltd. Montreal, Que.

WHEELS, corundum
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, emery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, propeller, iron and steel
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, turbine, water.
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, water (impulse type)
John McDougall Caledonian Iron Works Co., Ltd., Montreal. Que.

*For Display Advertisement See Index, Page 885

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHISKS
H. W. Nelson & Co., Toronto.

WHISKY
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE ENAMEL
*Berry Bros., Ltd., Winnipeg.

WHITE LEAD
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal Que.

WINDMILLS
*Goold-Shapley-Muir Co., Ltd. Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto

WINDOW SHADES
Daly & Morin, Montreal, Que.

WIRE
*Canada Wire & Iron Goods Co., Hamilton.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
The Graham Nail Works, Toronto

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRED GLASS:
*Metallic Roofing Co., Ltd., Toronto.

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnson & Sons, Ltd., Montreal, Que.

WIRE, insulated electric:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd. Hamilton.

WIRE, weather proof:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE WORK
C. H. Johnson & Sons, Ltd., Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co. Ltd., Toronto.

WOOD
Standard Fuel Co., Toronto.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi Chicoutimi, Que.

WOOD SPLIT PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

WOOL
H. V. Andrews, Toronto.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

WRAPPERS, book, bottle, etc.
*The Thompson & Norris Co., of Canada, Ltd., Niagara Falls, Ont.

WROUGHT PIPE:
*The Steel Co. of Canada, Ltd., Hamilton.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical
*The Canada Metal Co., Toronto.

*For Display Advertisement See Index Page 885

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.
SHEETS TUBES COPPER & BRASS AND RODS
SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT
115-121 SUMACH STREET TORONTO, CANADA

MADE-IN-CANADA
Toronto, Ontario
Mr. Manufacturer :—
Are you sincere in your desire to boost and make greater the British Empire by the buying of Canadian made goods? If so, look over the following list of high-grade oils, greases, compounds and paints manufactured in our oil refinery at Petrolia and our paint works at Toronto, Ontario. A postal card from you will bring you full information regarding the goods in which you are interested.
CYLINDER OIL
ENGINE OIL
MACHINE OIL
DYNAMO OIL
TANNER'S OIL
BLACK LEATHER OIL
PARRAFINE WAX
MINERAL SOAP STOCK
BENZINE
CANADIAN OIL COMPANIES LIMITED Quality First NATIONAL BRANDS
WHITE LEAD
READY MIXED PAINT
COLORS IN OIL
VARNISHES
BLACK JAPANS
STEEL BRIDGE PAINTS
ROOFING PAINTS
CUP GREASE
LINSEED OIL SOAP

"BEATTY"
USED FROM COAST TO COAST
Hoisting Engines
Dredges
Steel Scows
Clamshells
Centrifugal Pumps
Drill Boats
Steel Derricks, Etc.
Ask for name of customer nearest you. We can safely refer you to him.
Tell us what you need in the way of Excavating or Material Handling Equipment.
Our experience and facilities will enable us to interest you.
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WELLAND, ONTARIO
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AGENTS—H. E. PLANT, 1790 St. James St., Montreal.
E. LEONARD & SONS, St. John, N.B.
ROBT. HAMILTON & CO., Vancouver, B.C.
A. R. WILLIAMS MACHINERY CO., Winnipeg, Man.

STAINS
R. C. Jamieson & Co., Ltd., Montreal, Que.

STAINS, creosote shingle
A. Muirhead Co., Ltd., Toronto.

STAMPINGS
*Dominion Stamping Co., Ltd., Walkerville, Ont.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMP MILLS:
*Jenckes Machine Co., Sherbrooke.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM PIPE and BOILER COVERINGS, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS
*M. Beatty & Sons, Ltd., Welland, Ont.

STEAM SPECIALTIES:
*Sheldons, Ltd., Galt.

STEAM TRAPS
*Canadian Sirocco Co., Windsor, Ont.
*Canadian Morehead Manufacturing Co., Limited, Woodstock.

STEEL:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

STEEL BUILDINGS
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.
*Pedlar People, Ltd., Oshawa, Ont.

STEEL CASTINGS
*Canadian Steel Foundries. Ltd., Montreal, Que.

STEEL PEN STOCKS:
*Jenckes Machine Co., Sherbrooke.

STEEL RODS:
*The Steel Co. of Canada. Ltd., Hamilton.

STEEL SASH:
*Dennis Wire & Iron Works. Co., London.
*Henry Hope & Sons, Ltd., Toronto.

STEEL SHELVING:
*Dennis Wire & Iron Works. Co., London.

STENCILS, brass
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING
Central Press Agency, Toronto.

STOOLS AND BENCHES, piano and organ
*Otterville Mfg. Co., Ltd., Otterville, Ont.

STONE
The Corinthian Stone Co., Guelph, Ont.
The Hagersville Contracting Co., Hagersville, Ont.

STORE FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES
Tudhope-Anderson Co., Ltd., Orillia. Ont.
Bedford Stove Co., Bedford, Que.

STOVE BOARDS
Sheet Metal Products Co. of Canada, Ltd., Toronto.

STOVE LININGS
Standard Clay Products, Ltd., St Johns, Que.

STOVES AND RANGES
Bedford Stove Co., Bedford, Que
Gurney Foundry Co., Ltd., Toronto.
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont

STRETCHERS, lace curtain
*Otterville Mfg. Co., Ltd., Otter

STRUCTURAL STEEL
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd. Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

SUIT CASES
J. Eveleigh & Co., Ltd., Montreal
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

SURFACERS:
*Berlin Machine Works, Ltd. Hamilton.

SWITCHBOARDS
*The Canadian Independent Telephone Co., Ltd., Toronto.

SWITCHES, railway
Canadian Ramapo Iron Works, Ltd Niagara Falls, Ont.

SWITCHES AND FROGS
*Canadian Steel Foundries, Ltd. Montreal, Que.

SWITCH STANDS
*Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

TABLES, billiard
Samuel May & Co., Toronto.

TABLE COVERS, chenille
Hamilton Cotton Co., Hamilton Ont.

TANKS
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.
*The Waterous Engine Works Co., Ltd., Brantford.

TAPS
Pratt and Whitney Co. of Canada. Dundas. Ont.
*Butterfield & Co., Rock Island, P.Q

TAP WRENCHES
*Butterfield & Co., Rock Island, P.Q

TAPES, measuring
The Lufkin Rule Co., of Canada Ltd., Windsor, Ont.

TAPES, paper and cloth, gummed and ungummed
Gummed Papers, Ltd., Brampton, Ont.

TELEPHONE ACCESSORIES
Canadian Independent Telephone Co., Toronto.

TELEPHONE APPARATUS
*The Canadian Independent Telephone Co., Ltd., Toronto.

TELEPHONES, Automatic
*Canadian Independent Telephone Co., Toronto.

TENTS
Mackenzie & Co., Ottawa. Canada
Turner, J. J., & Sons, Peterborough, Ont.

TERRA ALBA
*Albert Mfg. Co., Hillsborough, N.B.

TERRA COTTA (architectural)
Toronto Plate Glass Importing Co., Ltd., Toronto.

THEATRE CURTAINS, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.

THUMB SCREWS:
*Canadian Billings & Spencer, Ltd., Welland.

TILING, interlocking rubber.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TIMBER:
*The B.C. Mills Timber & Trading Co., Vancouver. B.C.
James Sheppard & Son. Sorel. Que.

TANNERS' SUPPLIES
McClary Mfg. Co., London. Ont.

TIN WARE (stamped, pierced, japanned and lithographed)
Sheet Metal Products Co. of Canada. Ltd., Toronto.

TIRES, cycle, auto and truck.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.

TRADE MARKS AND DESIGNS
Ridout & Maybee, Toronto.

TRANSFORMERS
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TRANSFORMERS, power
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TOOLS, sheet metal workers
Brown Boggs Co., Ltd., Hamilton, Ont.

TOOLS, track
B. J. Coghlin Co., Ltd., Hamilton. Ont.

TRANSMISSION MACHINERY.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

TROLLEYS.
*Richard-Wilcox Canadian Co., Limited, London, Ont.

TRUCKS
The Gurney Scale Co., Hamilton, Ont.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber
*Waterous Engine Works Co., Ltd., Brantford.

TRUNKS
Lamontagne Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal, Que.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

TUBING, Brass and Copper
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Canadian Seamless Wire Co., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

TUBING, Gold and Silver
Canadian Seamless Wire Co., Toronto.

TURBINES, water.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TURBINES, steam:
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TURBINE AND RECIPROCATING PUMPS.
*The Bawden Machine Co., Limited, Toronto.

TWEEDS
Rosamond Woollen Co., Almonte, Ont.

TWINES, binder
Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton
Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS
Pratt and Whitney Co., of Canada. Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

UNDERWEAR
Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial
Kingston Hosiery Co., Ltd., Kingston. Ont.

UNIONS
*Dart Union Co., Ltd., Toronto, Ont.
*Otterville Mfg. Co., Ltd., Otterville, Ont.

UNDERWEAR TRIMMINGS
The Whitby Braid & Edging Co., Woodstock. Ont.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

VACUUM PUMPS
*The Bawden Machine Co., Limited, Toronto.

VALVES:
*Kerr Engine Co., Ltd., Walkerville.

VALVES, for steam and water
Jenkins Bros., Ltd., Montreal, Que.

VALVES, regrinding globe, angle cross checks, swing checks, etc.
Penberthy Injector Co., Ltd., Windsor, Ont.

VARNISHES
*Ault & Wiborg Co. of Canada, Ltd. Toronto.
Berry Bros., Walkerville, Ont.
*Dougall Varnish Co., Ltd., Montreal.
R. C. Jamieson & Co., Ltd., Montreal. Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal.

VAULTS and VAULT DOORS:
*The Goldie & McCullough Co., Ltd., Galt.

VENTILATING APPLIANCES:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons. Ltd., Galt.

VENTILATING SYSTEMS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
Gurney Foundry Co., Ltd., Toronto.

VENTILATORS:
*The Metallic Roofing Co. of Canada, Ltd., Toronto. Ont.
*Pedlar People, Ltd., Oshawa, Ont.

VINEGAR
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

WAGONS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

WALL COPING
Standard Clay Products, Ltd., St. Johns, Que.

WASHERS:
*The Steel Co. of Canada. Ltd., Hamilton.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTES, wool and cotton
Factory Waste and Metal Co., Montreal, Que.

WATER-PROOF CEMENT COATING
Benjamin Moore & Co., Ltd., Toronto.

WEBBING, elastic
Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic
Hamilton Cotton Co., Hamilton, Ont.

WHEELS
*Canadian Car & Foundry Co., Ltd. Montreal, Que.

WHEELS, corundum
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, emery
*Canadian Hart Wheels. Ltd., Hamilton, Ont.

WHEELS, propeller, iron and steel
*Wm. Kennedy & Sons. Ltd., Owen Sound, Ont.

WHEELS, turbine, water.
*Wm. Kennedy & Sons. Ltd., Owen Sound, Ont.

WHEELS, water (impulse type)
John McDougall Caledonian Iron Works Co., Ltd., Montreal. Que.

*For Display Advertisement See Index, Page 771

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHISKS
H. W. Nelson & Co., Toronto.

WHISKY
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE ENAMEL
*Berry Bros.. Ltd.. Winnipeg.

WHITE LEAD
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal. Que.

WINDMILLS
*Goold-Shapley-Muir Co., Ltd. Brantford. Ont.
*Ontario Wind Engine & Pump Co.. Ltd.. Toronto.

WINDOW SHADES
Daly & Morin, Montreal, Que.

WIRE
*Canada Wire & Iron Goods Co., Hamilton.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
The Graham Nail Works, Toronto.

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRED GLASS:
*Metallic Roofing Co., Ltd., Toronto.

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnson & Sons, Ltd., Montreal. Que.

WIRE, insulated electric:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE ROPE
The Dominion Wire Rope Co., Ltd. Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

WIRE, weather proof:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE WORK
C. H. Johnson & Sons, Ltd., Montreal, Que.
*Canada Wire & Iron Goods Co. Hamilton.
*The Geo. B. Meadows. Toronto Iron and Brass Goods Works Co.. Ltd., Toronto.

WOOD
Standard Fuel Co., Toronto.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi Chicoutimi. Que.

WOOD SPLIT PULLEYS.
*Dodge Mfg. Co.. Ltd.. Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

WOOL
H. V. Andrews, Toronto.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co.. Almonte, Ont.

WRAPPERS, book, bottle, etc.
*The Thompson & Norris Co., of Canada, Ltd., Niagara Falls, Ont.

WROUGHT PIPE:
*The Steel Co. of Canada, Ltd., Hamilton.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical
*The Canada Metal Co., Toronto.

*For Display Advertisement See Index Page 771

THE WORLD'S PRODUCTION OF RUBBER.

In view of the recent embargo placed upon the export of rubber from the British Empire, the following statement of the world's production of rubber, in tons, may be interesting:

	Plantation	Brazil	Other	Total
1906.....	510	36,000	29,700	66,220
1907.....	1,000	38,000	30,000	69,000
1908.....	1,800	39,000	24,600	65,400
1909.....	3,600	42,000	24,000	69,600
1910.....	8,200	40,800	21,500	70,500
1911.....	14,419	37,730	23,000	75,149
1912.....	28,518	42,410	28,000	98,928
1913.....	47,618	39,370	21,452	108,440
1914 (est.).....	65,000	32,000	10,000	107,000

Of the 108,440 tons of pure rubber produced in 1913, 47,200 tons were plantation rubber; 39,370 tons, Brazilian rubber, and 21,870 tons other wild rubber. Of these 108,440 tons, 48,000 tons were consumed in the United States; 18,640 tons, in the United Kingdom; 15,500 tons, in Germany; 9,000 tons, in Russia; 6,500 tons, in France; 3,000 tons, in Belgium; 3,000 tons, in Austria-Hungary; 2,000 tons, in Italy; 1,500 tons, in Scandanavia, and 1,300 tons, in Japan and Australia.

MADE-IN-CANADA

Toronto, Ontario

Mr. Manufacturer :—

Are you sincere in your desire to boost and make greater the British Empire by the buying of Canadian made goods? If so, look over the following list of high-grade oils, greases, compounds and paints manufactured in our oil refinery at Petrolia and our paint works at Toronto, Ontario. A postal card from you will bring you full information regarding the goods in which you are interested.

CYLINDER OIL
ENGINE OIL
MACHINE OIL
DYNAMO OIL
TANNER'S OIL
BLACK LEATHER OIL
PARRAFINE WAX
MINERAL SOAP STOCK
BENZINE

CANADIAN OIL COMPANIES LIMITED
Quality First
NATIONAL BRANDS

WHITE LEAD
READY MIXED PAINT
COLORS IN OIL
VARNISHES
BLACK JAPANS
STEEL BRIDGE PAINTS
ROOFING PAINTS
CUP GREASE
LINSEED OIL SOAP

"BEATTY"

USED FROM COAST TO COAST

Hoisting Engines
Dredges
Steel Scows
Clamshells
Centrifugal Pumps
Drill Boats
Steel Derricks, Etc.

Ask for name of customer nearest you. We can safely refer you to him.

Tell us what you need in the way of Excavating or Material Handling Equipment.

Our experience and facilities will enable us to interest you.

Write TODAY for New Literature

M. BEATTY & SONS LIMITED
WELLAND, ONTARIO

TORONTO BRANCH: 4th Floor, 154 Simcoe St.

AGENTS—H. E. PLANT, 1790 St. James St., Montreal.
E. LEONARD & SONS, St. John, N.B.
ROBT. HAMILTON & CO., Vancouver, B.C.
A. R. WILLIAMS MACHINERY CO., Winnipeg, Man.

STEEL SHEETS

"Southern Cross"

COLD ROLLED ; CLOSE ANNEALED

Specially adapted for stove and range makers and others desiring a sheet to stand severe work. : :

JOHN LYSAGHT, LIMITED

BRISTOL : NEWPORT : MONTREAL

MADE IN CANADA

DOUGALL

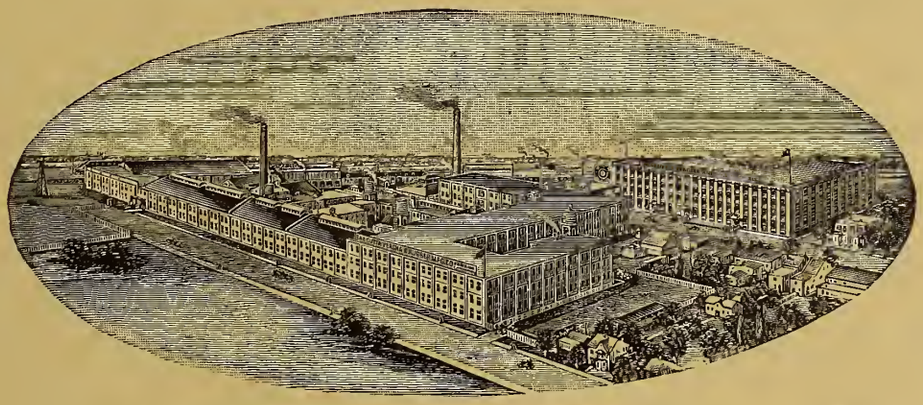
VARNISH

The Varnish That Lasts Longest

HIGH-GRADE RUBBER GOODS

(MADE IN CANADA)

Superior in Quality---Satisfactory in Service



BELTING
For all purposes
PACKINGS
VALVES
TUBING
TIRES
TILING
MATS
MOULDED GOODS

Sole manufacturers of the celebrated "MALTESE CROSS" and "LION" Brands Rubbers. The best fitting, best wearing and most stylish rubber footwear on the market.

RUBBER HOSE
for
WATER
SUCTION
STEAM
AIR
FIRE PROTECTION
ACIDS
BREWERS
PNEUM. TOOLS

GUTTA PERCHA & RUBBER, Limited

Head Offices: 47 YONGE ST., TORONTO, CANADA

TRUMBULL WARREN, Pres. and Treas. R. H. GREENE, Sec'y C. N. CANDEE, Vice-Pres. and Man. Director

Branches: Montreal, Winnipeg, Calgary, Vancouver; Melbourne, Vic.; Sydney, N.S.W.

28 "Service" Branches Throughout Canada

Canadian Consolidated Rubber Co., Limited

Montreal, P.Q.

¶ Preach "Made in Canada" and also Practice "Made in Canada"

BUY FOR YOUR OWN PLANT

GOODS THAT ARE "MADE IN CANADA"

¶ Let us quote you on Hose, Belting, Packing, Tires, and your other requirements in Rubber Goods

WRITE OR WIRE OUR NEAREST BRANCH

Canadian Consolidated Rubber Co., Limited

Montreal, P.Q.

28 "Service" Branches Throughout Canada

EVERY shipper wants to reduce expenses in his department. This being a self-evident fact, we would advise a careful investigation of the famous T & N Corrugated Boxes.

Very light and strong. Come to you flat, thus saving space. Set up without resorting to skilled labor.

Investigate at our expense. Send on a case of your goods at our expense, and we will return in our sample. No charge whatever to you.



CELLULAR BOARD
FACED ON BOTH SIDES

This illustration tells an interesting story. Just see the difference in weight



A BOX OF CELLULAR BOARD
Inside measurement 13 x 10⅛ x 8½; weight empty 1 lb. 12½ ozs.

A BOX OF WOOD
Inside measurement, 13 x 10⅛ x 8½; weight empty, 5 lbs. 11½ ozs.

T&N

The Thompson & Norris Co. of Canada, Limited

Lewis Avenue, NIAGARA FALLS, ONTARIO

Brooklyn, N.Y.; Boston, Mass.; Brookville, Ind.; London, Eng.; Jülich, Germany. ESTABLISHED 1875

STEEL SHEETS

"Southern Cross"

COLD ROLLED ; CLOSE ANNEALED

Specially adapted for stove and range makers and others desiring a sheet to stand severe work. : :

JOHN LYSAGHT, LIMITED

BRISTOL : NEWPORT : MONTREAL

POLSON IRON WORKS

LIMITED

Toronto - Canada

STEEL SHIPBUILDERS
ENGINEERS AND
BOILERMAKERS

Hydraulic and Dipper Dredges, Steel and Composite Steamers and Yachts, Marine and Stationary Engines and Boilers. :: ::

Office and Works

ESPLANADE STREET EAST

Toronto

AGENTS FOR QUEBEC

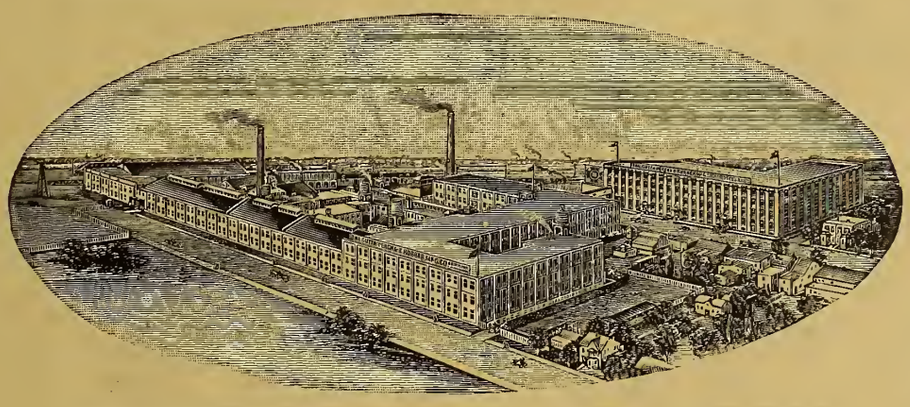
WATSON JACK & CO.

709 Power Building - Montreal, Que.

HIGH-GRADE RUBBER GOODS

(MADE IN CANADA)

Superior in Quality---Satisfactory in Service



BELTING
For all purposes
PACKINGS
VALVES
TUBING
TIRES
TILING
MATS
MOULDED GOODS

Sole manufacturers of the celebrated "MALTESE CROSS" and "LION" Brands Rubbers. The best fitting, best wearing and most stylish rubber footwear on the market.

RUBBER HOSE
for
WATER
SUCTION
STEAM
AIR
FIRE PROTECTION
ACIDS
BREWERS
PNEUM. TOOLS

GUTTA PERCHA & RUBBER, Limited

Head Offices: 47 YONGE ST., TORONTO, CANADA

TRUMBULL WARREN, Pres. and Treas. R. H. GREENE, Sec'y C. N. CANDEE, Vice-Pres. and Man. Director

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BUY FOR YOUR OWN PLANT

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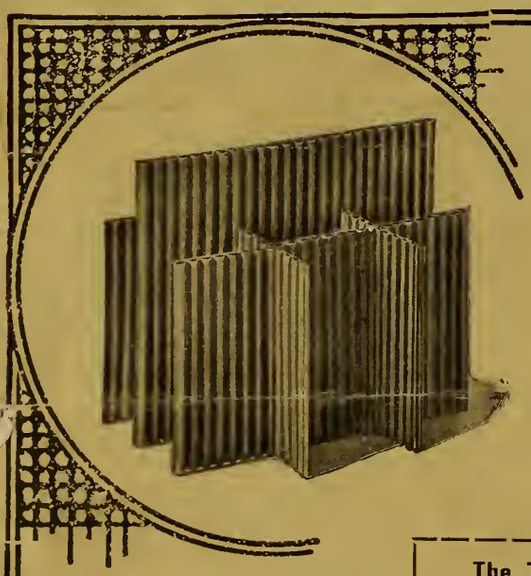
¶ Let us quote you on Hose, Belting, Packing, Tires, and your other requirements in Rubber Goods

WRITE OR WIRE OUR NEAREST BRANCH

Canadian Consolidated Rubber Co., Limited

Montreal, P.Q.

28 "Service" Branches Throughout Canada



Corrugated Partition Packing

FOR THE SHIPMENT OF BOTTLES, ETC.

The old-time saw-dust method of packing bottles, jars, etc., is fast becoming extinct in the best preserving and canning factories. The corrugated paper partition packing is the best insurance against breakage, allows of easier packing, saves labor and muss for both the shipper and the consignee.

T. & N. Corrugated Boxes are used for all kinds of shipping. Send a sample case at our expense and we will return it to you packed in our goods.

T&N

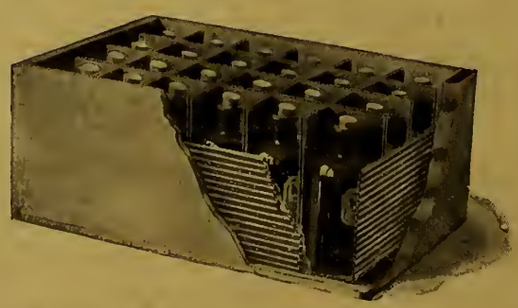
The Thompson & Norris Co.
of Canada, Limited
Niagara Falls, Ont.

Send further particulars:

Name .....

Address .....

I.C.

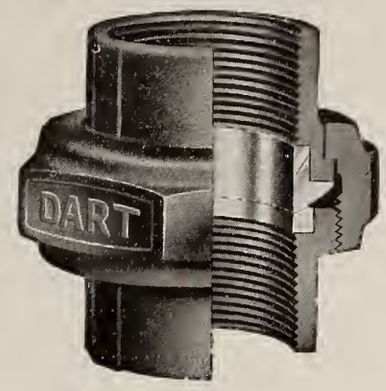


The

Thompson & Norris Co. of Canada, Limited

NIAGARA FALLS, ONTARIO

BROOKLYN, N.Y. BOSTON, MASS. BROOKVILLE, IND. LONDON, ENGLAND JULICH, GERMANY



DART UNION PIPE COUPLINGS

BRONZE AGAINST BRONZE AT JOINT

Never Leak
Require No Attention
Do Not Deteriorate
Always On The Job

You have no Expense Keeping Pipe Joints Right if they are Made with Dart Unions. Ask Your Jobber.

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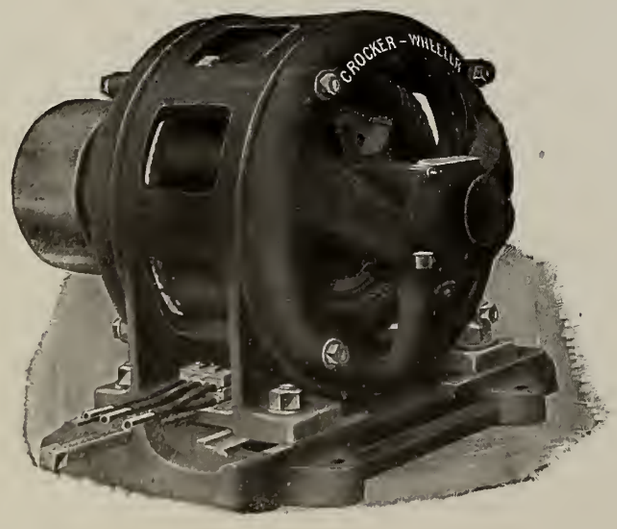
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THE DESIGN OF

CROCKER-WHEELER INDUCTION MOTORS

INCLUDES:

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features; Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works: St. Catharines

District Offices: Montreal, Toronto, Vancouver

The Time to Advertise

You are well aware of how conservatively the retailer is buying to-day ---what he must have he buys, but nothing else.

He is confining himself more closely than ever to advertised lines---lines for which his customers ask.

These he is compelled to carry---the others have to wait.

Never before has advertising been so necessary as it is to-day.

Many Manufacturers will not see this---or seeing it, will not take advantage of the opportunity it offers them.

The Manufacturer who advertises now will get all the business that is going, and he will be laying a solid foundation on which to build for the expanding business of the near future.

In this connection we have a proposition that will interest you.

Street car advertising is a Manufacturer's proposition.

It is national in scope, reasonable in price and reaches a larger number of people at less cost than any other form of Publicity.

It is worth your while to get all the facts.

Let us come and talk it over with you. Address any of our offices.

The Canadian Street Car Advertising Co., Limited

Montreal Toronto Winnipeg

Canadian made for Canadian trade
THE NATIONAL ACME MFG CO MONTREAL

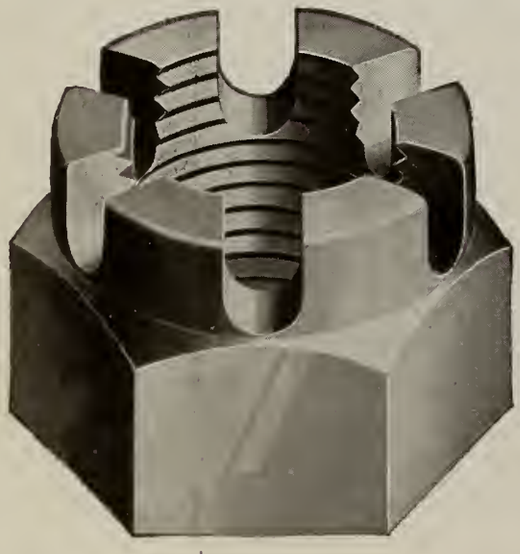
Immediate Deliveries

WHEN you need Standard Screws and Nuts on rush orders, get them from our complete stock.

With full style and size assortments we are able to fill your order the day it is received. Contracts also solicited.

The stock includes:—"V" and U.S.S. Cap and Set Screws; A.L.A.M. Cap Screws; A.L.A.M. Nuts; "V" Semi-finished Nuts and Hexagon Brass Nuts.

Studs are threaded to order promptly.



*The "**Red Book**" is a complete list for buyers.*
(Sent free.)

SPECIAL SCREW MACHINE PRODUCTS

made accurately to your specifications and exceptionally well finished.

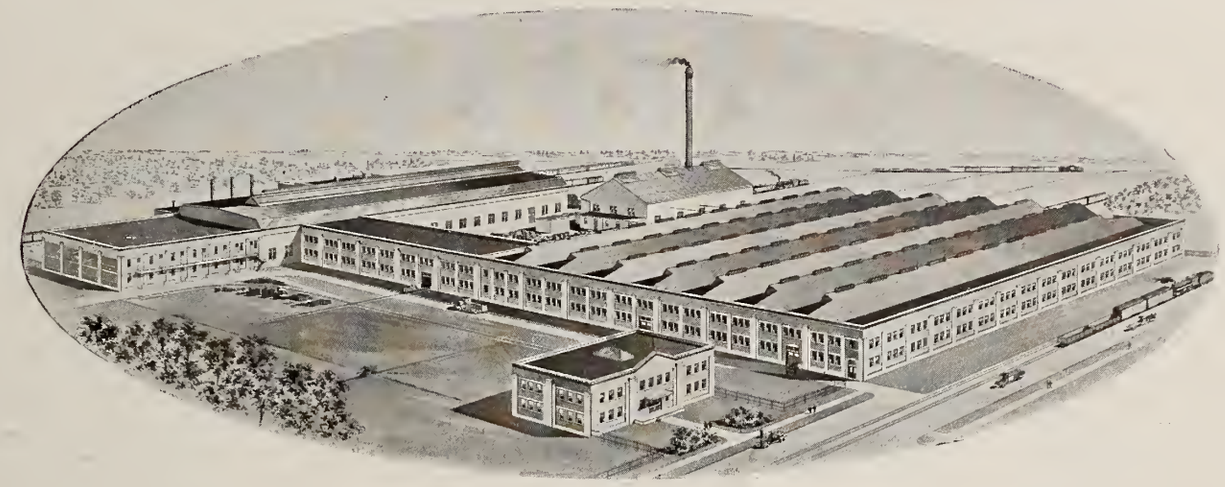
The size may be anything from 2¼ in. down. Send your samples for estimates and get the booklet "Special Products."

"Vital" Spark Plugs—made in Montreal—give complete ignition service. At your dealers. "Vital Facts" folder on request.

THE NATIONAL ACME MFG. CO.

In St. Henri at G.T.R. **Montreal, P.Q.**

A Canadian Organization That Serves the Interests of Canadian Wood-Workers



Berlin Wood-Working Machines Are MADE IN CANADA

The "BERLIN" Line

ALL TYPES OF

Planing, Sanding and Sawing Machinery for Saw Mill, Planing Mill and Factory.

Investigate Berlin Machines for Your Needs.

Berlin Machines were First Built at Berlin, Wis., U.S.A.

The name "Berlin" has been closely associated with the woodworking industry ever since the first power feed drum sanding machine was built in a little shop at Berlin, Wis., U.S.A., nearly thirty-five years ago.

Later the company moved from the little town that gave the concern its name—"Berlin" Machine Works. They added to their line—began building and perfecting planing and sawing machinery as well as sanders.

For years they manufactured woodworking machinery of various type for saw mill, planing mill and factory for the U.S. and Canadian trade at their Beloit, Wis., plant.

Then the desirability of handling Canadian business from a directly-in-Canada organization became evident. A branch factory with offices was built in Hamilton, Ont., in 1908, which to-day is one of the best-equipped plants of its kind in Canada.

Every Canadian woodworker should have a general catalog of Berlin Canadian built Woodworking Machinery.

Write for it on your letterhead.

BERLIN MACHINE WORKS, LTD., Hamilton, Ont.

Largest Manufacturers of Woodworking Machinery in the World

UNITED STATES PLANT : : : : : : : BELOIT, WISCONSIN

THE GEO. B. MEADOWS

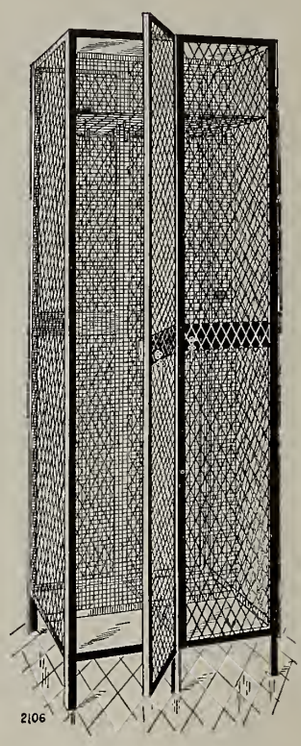
TORONTO WIRE, IRON AND BRASS WORKS CO., LIMITED

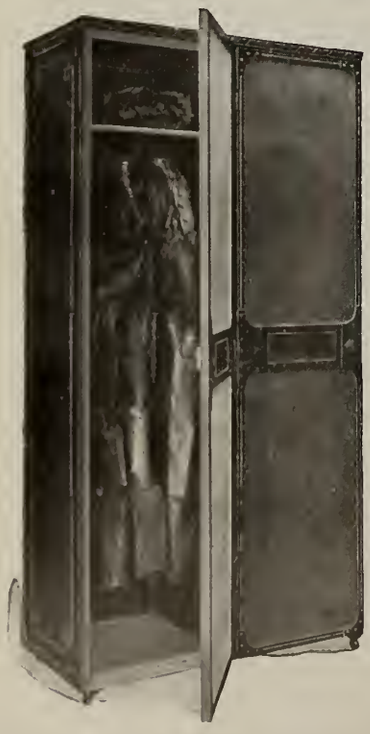
479 West Wellington Street, Toronto, Canada

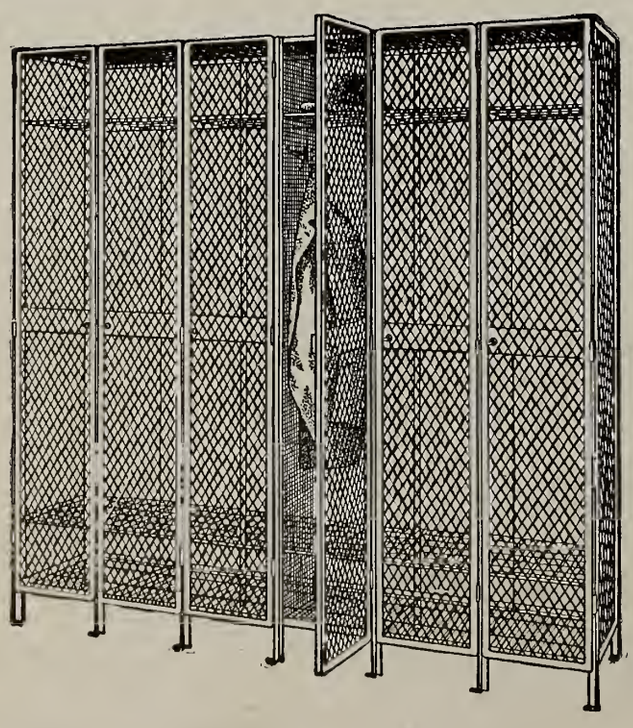
Manufacture Steel Lockers for Fire Protection



There is a Time to Save
NOW!
There is a Way to Save
ALWAYS!
Men Lost, Time Lost
Material Lost, Profit Lost
SIGNIFY WASTE
WASTE = CRIME
CRIME LEADS TO——









THE COST OF IRON OR STEEL



STEEL MATERIAL RACKS

is Small in Proportion to Protection Against Loss of Life, Insurance, Workmen's Compensation and the Coming Added Taxation of Manufacturers



STEEL DRAWERS AND TABLES

THE GEO. B. MEADOWS

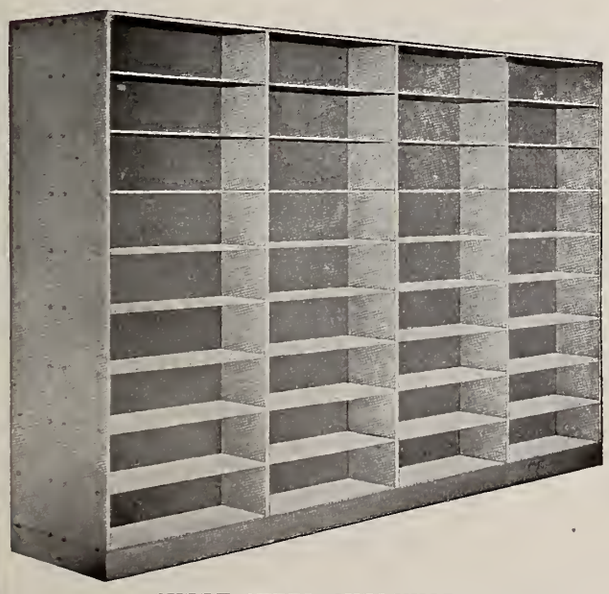
TORONTO WIRE, IRON AND BRASS WORKS CO., LIMITED

Toronto, Canada

Contractors and Manufacturers of

IRON, STEEL AND BRASS INTERIOR FITTINGS

For Factories, Warehouses Banks and Offices



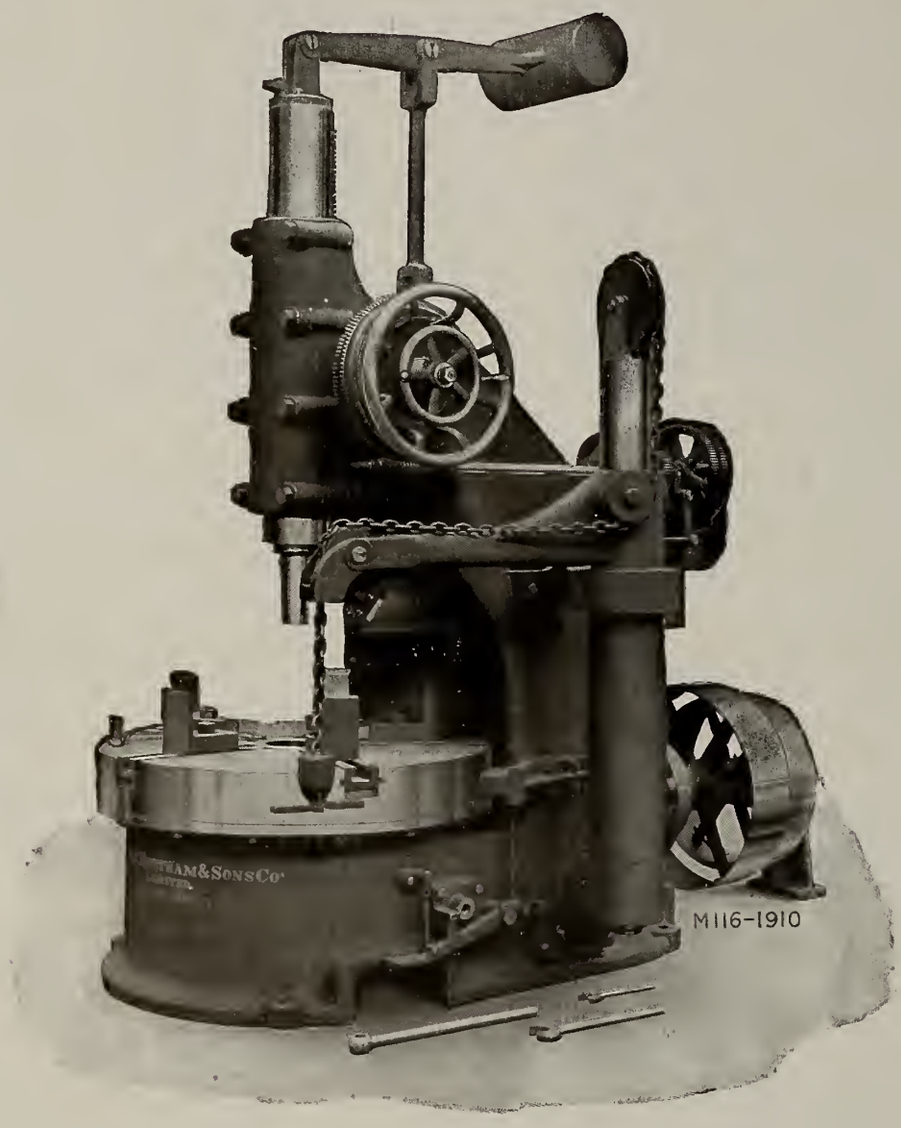
SHEET STEEL SHELVING

WE MAKE IRON FENCING AND WIRE WORK OF ALL KINDS TOO



IRON STAIRCASES

BERTRAM MACHINE TOOLS



42" CAR WHEEL BORER EQUIPPED WITH AIR HOIST FOR WHEELS

We Manufacture a Full Line of Locomotive and Car Shop Machinery

THE JOHN BERTRAM & SONS CO., Limited

DUNDAS, ONTARIO, CANADA

723 Drummond Bldg.
MONTREAL

VANCOUVER

Bank of Hamilton Bldg.
WINNIPEG

THE STEEL COMPANY OF CANADA LIMITED

"HAMILTON"

PIG IRON,

STEEL & IRON BARS

"TIGER" WHITE LEAD

WIRE, WIRE NAILS, STAPLES,

WOOD AND MACHINE SCREWS, PUTTY,

WROUGHT PIPE AND NIPPLES

"INVINCIBLE" FENCING,

BOLTS AND NUTS.

PROMPT SHIPMENTS

SALES OFFICES:

HAMILTON, MONTREAL, WINNIPEG

TORONTO, VANCOUVER

VICTORIA, ST. JOHN

HALIFAX

THE STEEL COMPANY OF CANADA LIMITED

THE STEEL COMPANY OF CANADA LIMITED

THE STEEL COMPANY OF CANADA LIMITED

THE STEEL COMPANY OF CANADA LIMITED

CANADIAN NATIONAL EXHIBITION

Toronto, August 28th—1915—September 13th

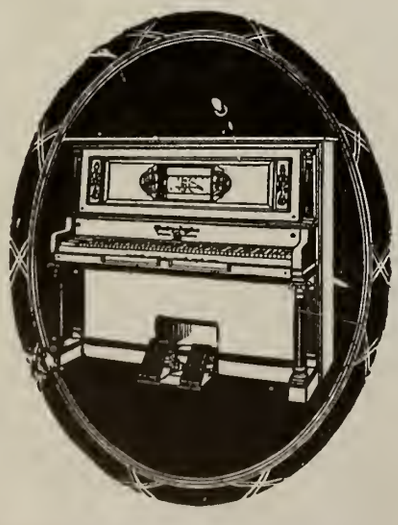
Applications for Space to Receive Fair Consideration should be made at the Earliest Possible Moment

FOR ALL INFORMATION WRITE

J. O. ORR, General Manager, City Hall, Toronto

Men forget business cares in the enjoyment of

Gourlay-Angelus
Player-Pianos



A GOURLAY-ANGELUS provides ANYONE with the ability to play ANY music artistically.

In the opportunity for recreation thus afforded, many busy men find enjoyment hitherto undreamed of, as well as a complete rest from the business worries and cares of the day. If you find it hard to leave these cares behind you when you go home, depend upon it, a Gourlay-Angelus will make you forget them.

One Toronto manufacturer tells of this pleasure in a Gourlay-Angelus as follows:—"I have always been glad I purchased the Gourlay-Angelus. The longer I have it the more I enjoy it and the more I use it."

Write for Catalogue and Prices

GOURLAY, WINTER & LEEMING,
188 Yonge St., Toronto

TRADING ON SENTIMENT

The old saying about there being no sentiment in business is just about as untrue as many other such statements.

The instant response all over Canada to the "Made-in-Canada" campaign is perhaps the best possible demonstration of the fact that there is sentiment, and a very great deal of it, in all modern business relations, and that that business which does not contain a great deal of sentiment in its dealings with its customers, should take careful thought as to its future.

But general sentiment, like a favorable tide, is of small importance if advantage is not taken of it. The sentiment of the consumer in favor of "Made-in-Canada" goods is not going to be of any lasting benefit to a manufacturer unless he is seized with the importance of the sentiment in his responsibility in making good goods.

And the manufacturer who will get most good out of the "Made-in-Canada" movement will see to it that the general sentiment created is crystalized into a preference for his own particular line. This can best be done through advertising cautiously, yet courageously, tying the goods up to the "Made-in-Canada" movement, but emphasizing the fact that viewed from any standpoint the sentiment is good business.

We have already shown several manufacturers how to take advantage of the present situation, and we are in a position to advise you as to the best method of advertising and marketing your product.

On request we will be glad to make a study of your particular needs, and to submit complete plans and estimates.

Address nearest office.

A. McKim Limited

ADVERTISING AGENCY

MONTREAL
Lake of the Woods Building

TORONTO
103 Bay St.

WINNIPEG
Union Bank Building

LONDON, ENG.
4 and 5 Norfolk St., W.C.



THIS emblem stands for fifty years of recognized business stability, for an organization that covers the country with its branches and service stations and, above all, for assurance of responsibility. Every J-M product is made not merely to sell, but to give service. To assure the permanent satisfaction of every J-M customer and to insure Full Service of every J-M product, this company pledges the whole measure of J-M Responsibility.

J-M Asbestos Roofing Needs No Maintenance

Never needs paint, gravel or any other protection. So it saves money in the long run. In service on hundreds of buildings for more than twenty-five years without costing a cent for maintenance.

Made of Asbestos and Trinidad Lake Asphalt—both minerals. Literally a flexible stone roofing. Real fire protection. Not affected by heat, cold, salt air or acid fumes.

Write nearest branch for "J-M Asbestos Roofing" catalogue.

The Canadian
H. W. Johns-Manville Co., Ltd.

Manufacturers of Asbestos and Magnesia Products

Asbestos Roofings Packings, Electrical Supplies, Etc.

TORONTO, MONTREAL, WINNIPEG, VANCOUVER

WATERPROOF INSURANCE

The use of **Safety Waterproof Fibre** will insure your packages against dampness from snow, rain, or wet trucks and platforms.

Particularly suitable for case lining, export packages and express parcels.

It is tough—waterproof—stands the wear and tear of traffic. Send for samples of various weights and prices.

TRADE MARK

This Trade Mark a guarantee of quality.

MADE IN CANADA AND SOLD ON ITS MERITS BY

CANADA PAPER CO., LIMITED

PAPER MAKERS

MONTREAL TORONTO WINDSOR MILLS, P.Q.

The Montreal Lithographing Company, Limited

High Class Lithographers and Designers of

CALENDARS SHOW CARDS

LABELS OFFICE STATIONERY

ADVERTISING PLAYING CARDS

Office and Works

ONTARIO STREET & PAPINEAU AVENUE

MONTREAL, CANADA

MADE IN CANADA

SUPPORT CANADIAN INDUSTRY

BY HAVING YOUR STATIONERY ON ONE OF THE FOLLOWING STANDARD GRADES:

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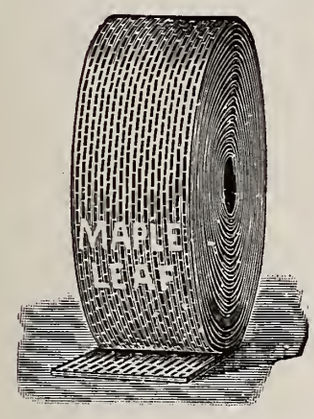
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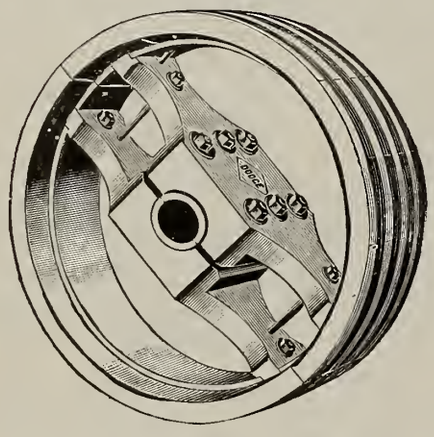
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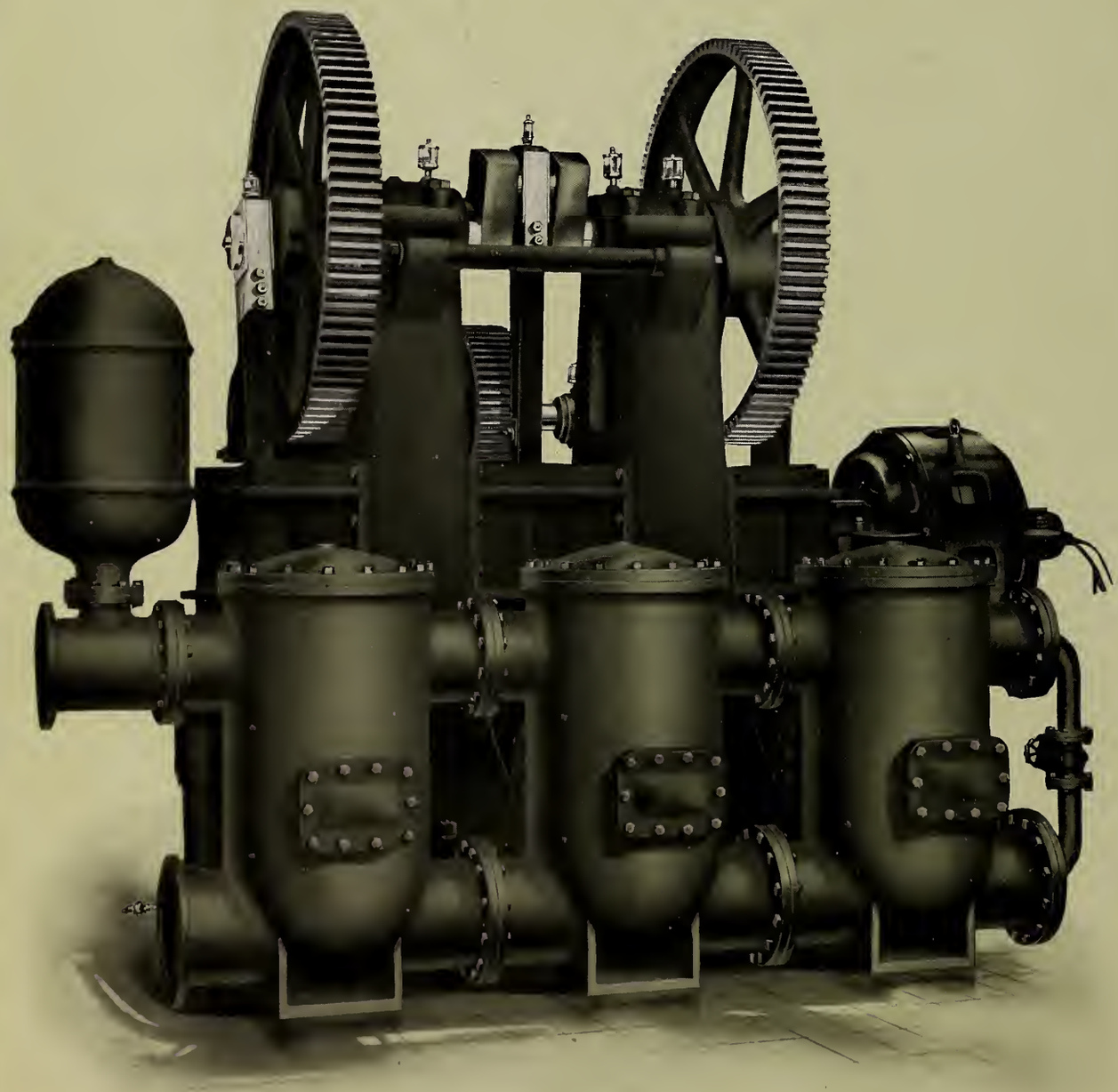
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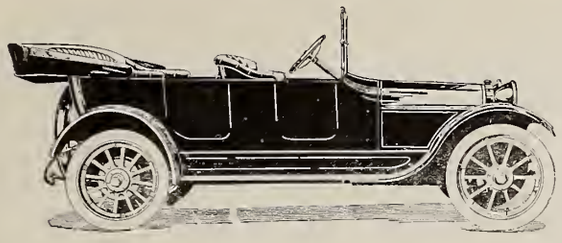
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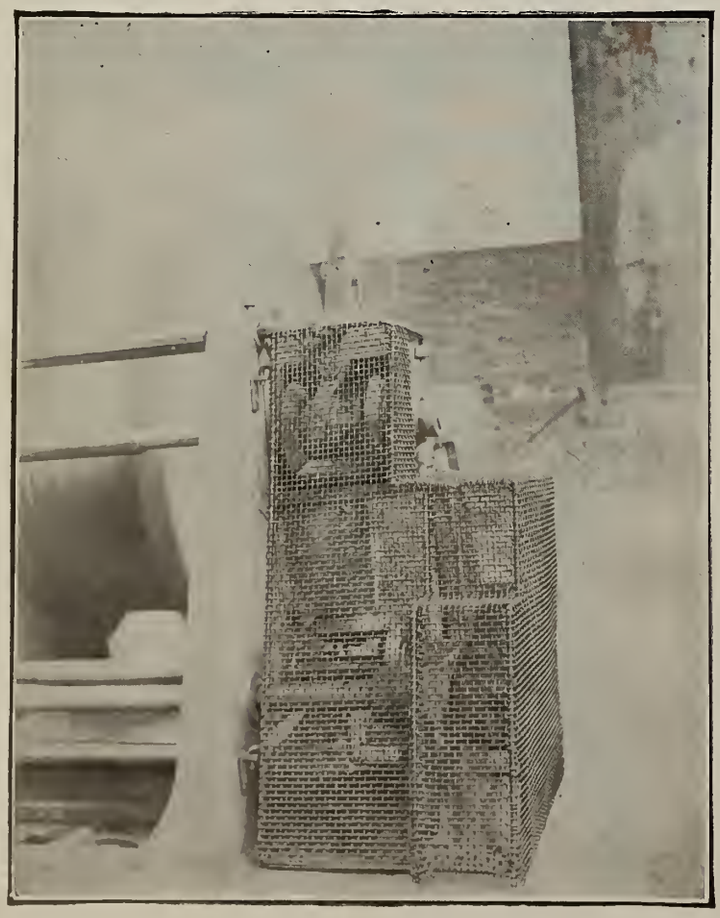
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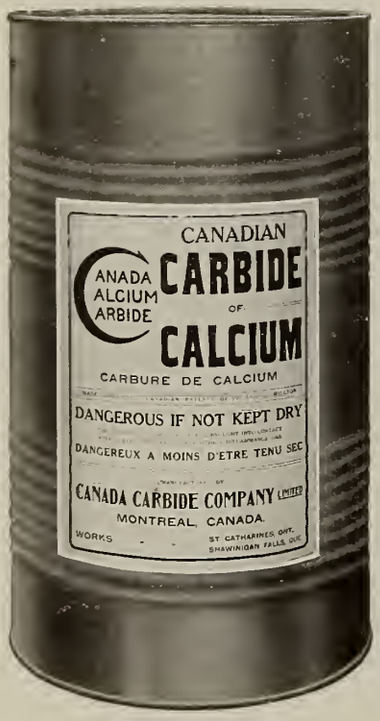
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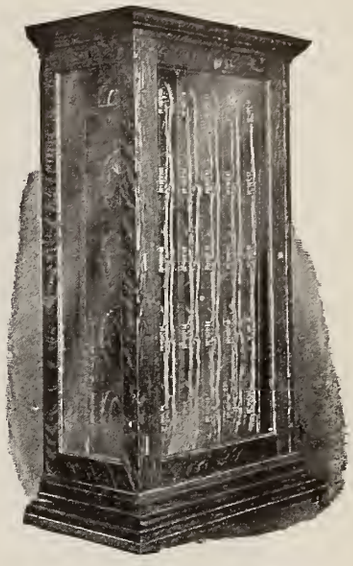
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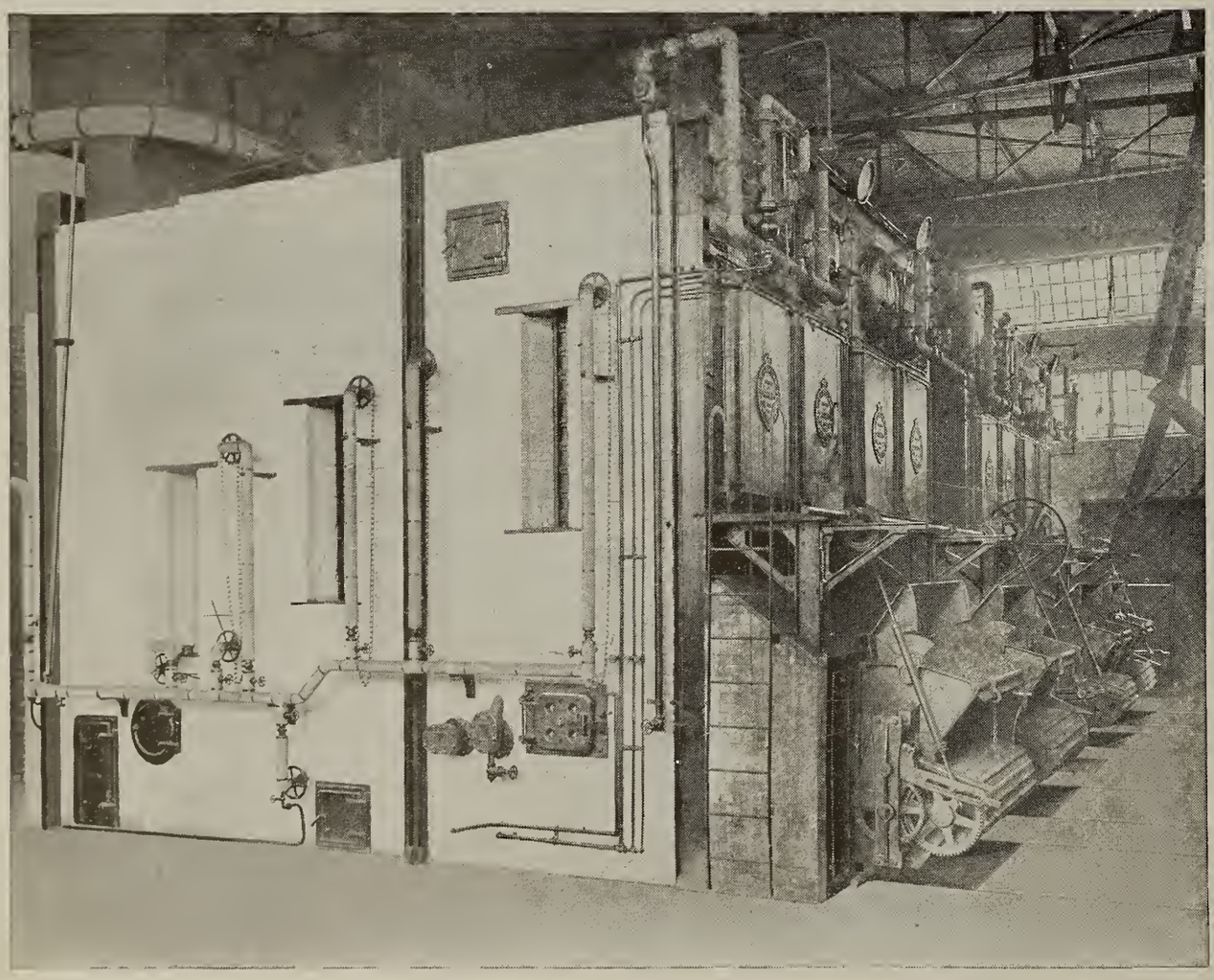


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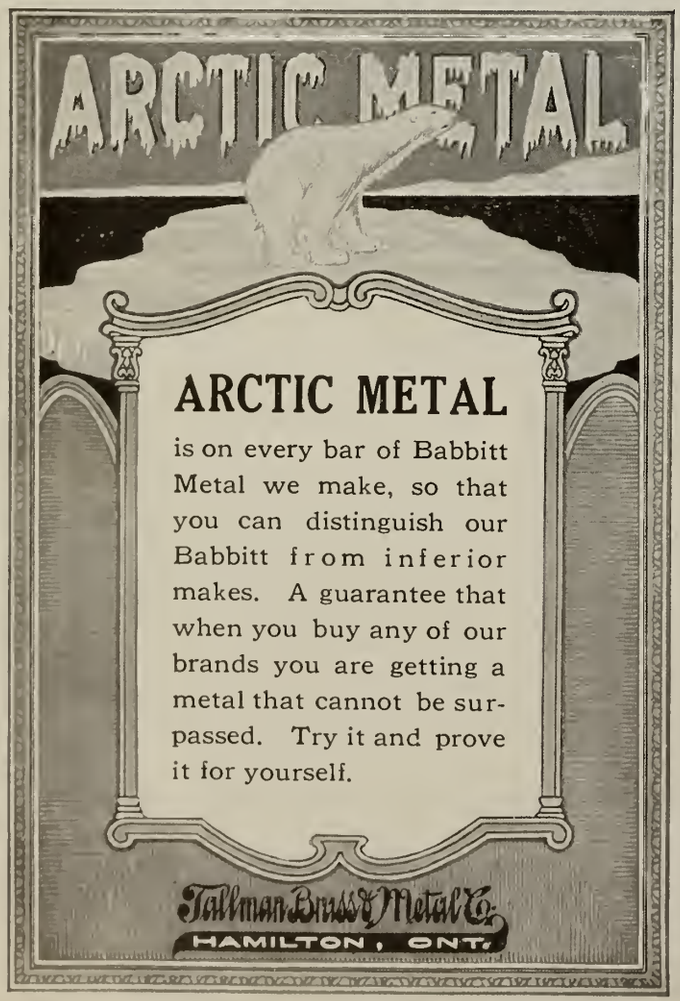
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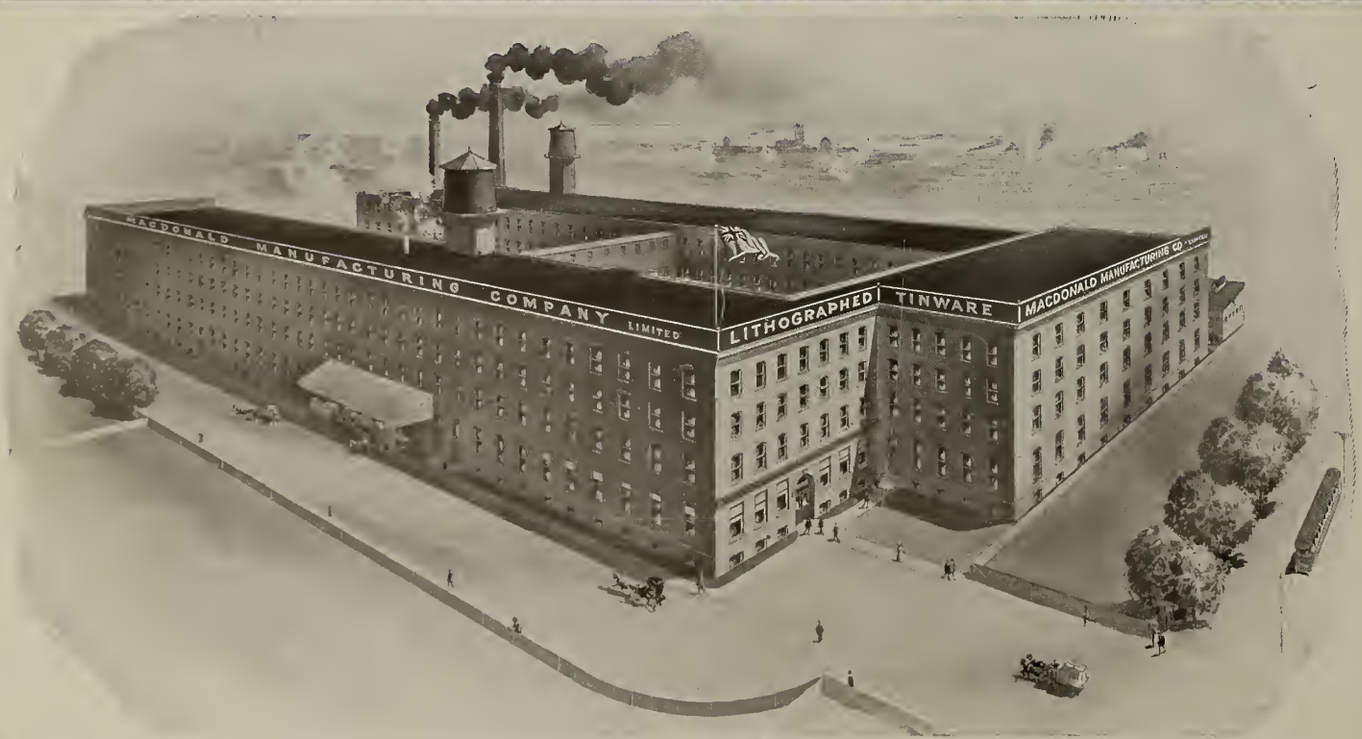
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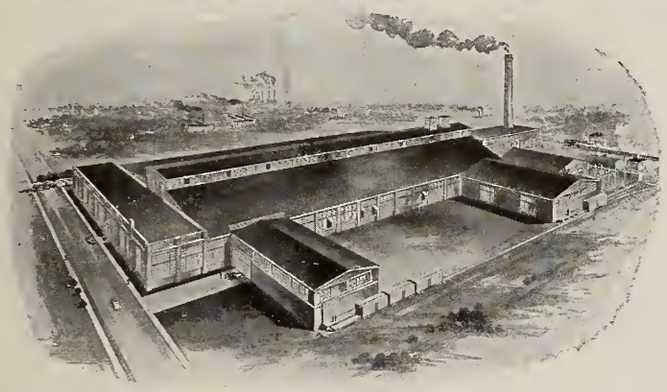
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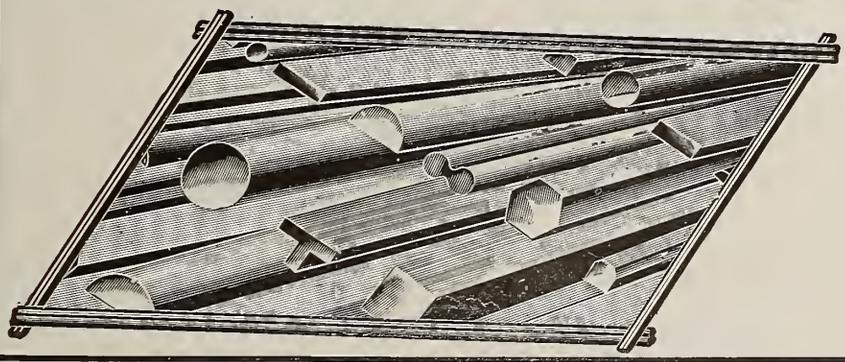
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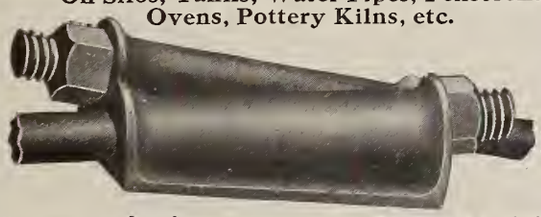
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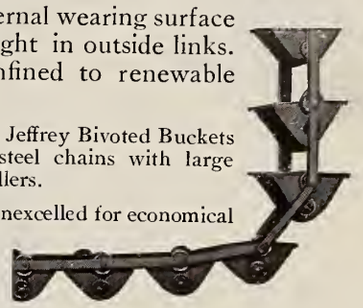
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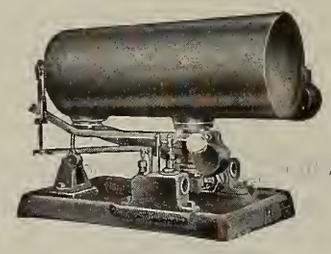
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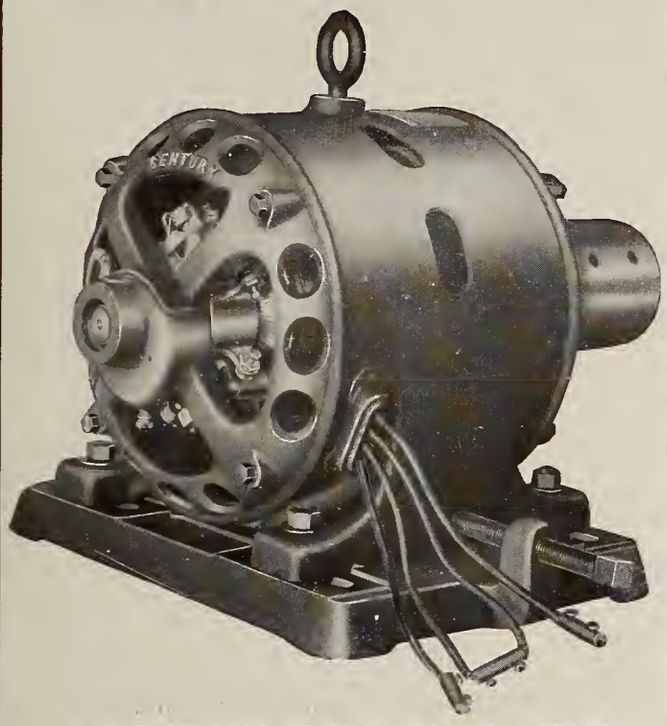
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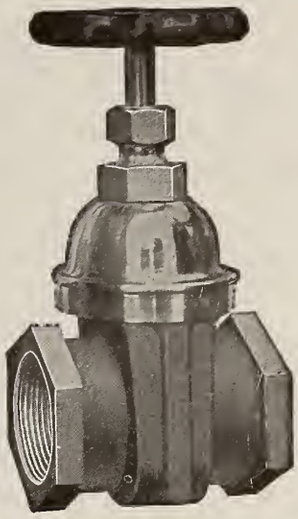
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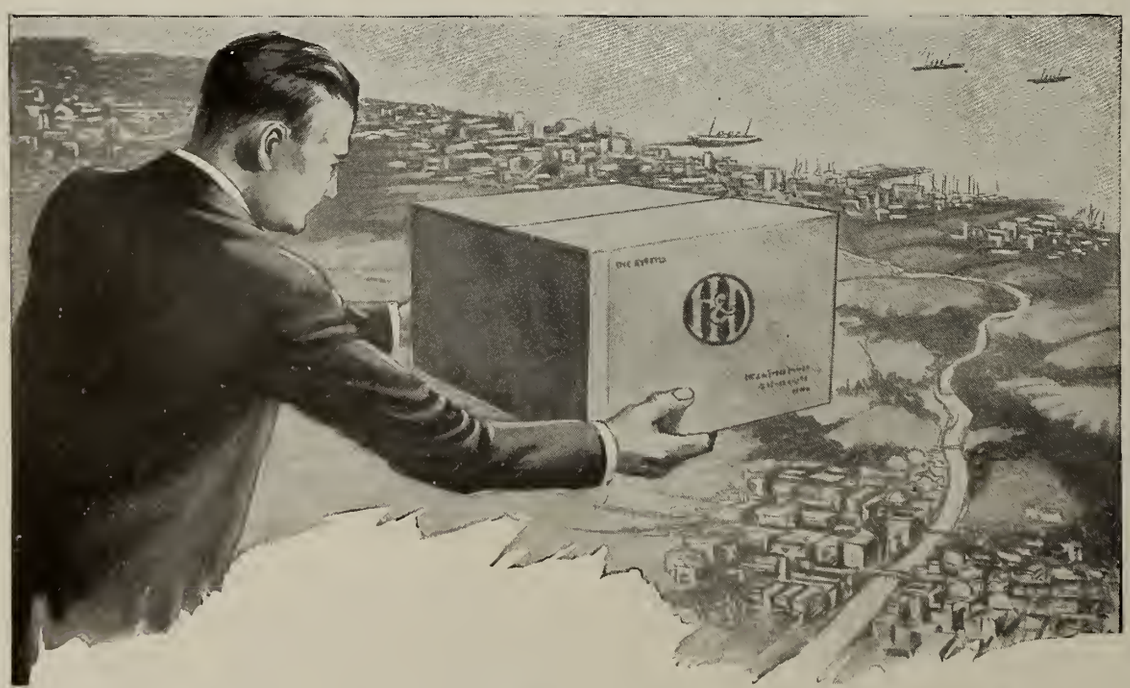
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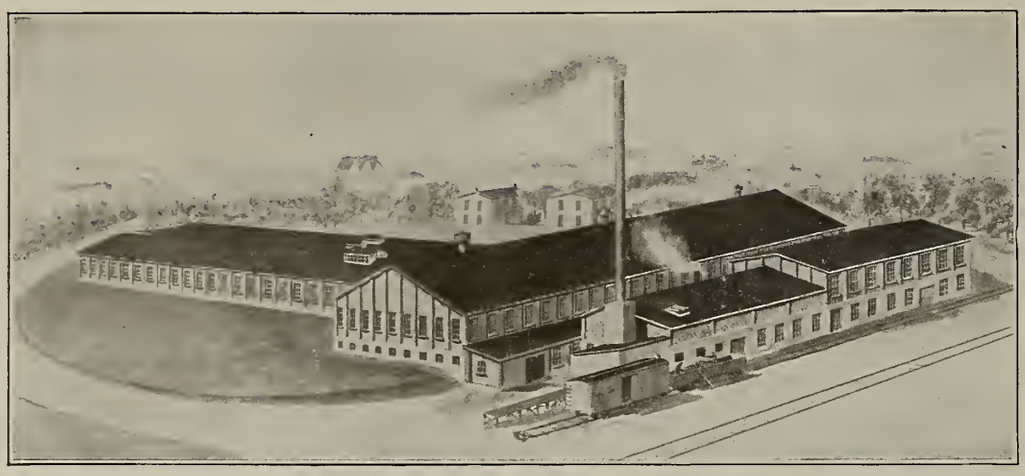
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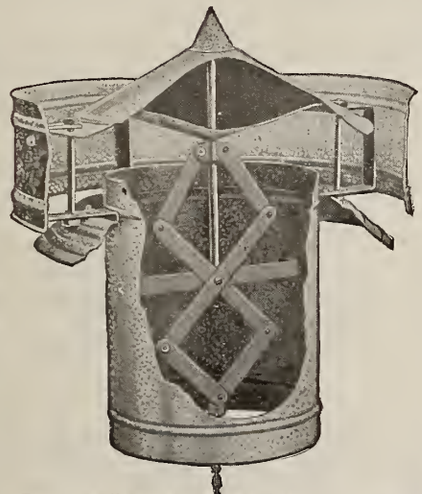
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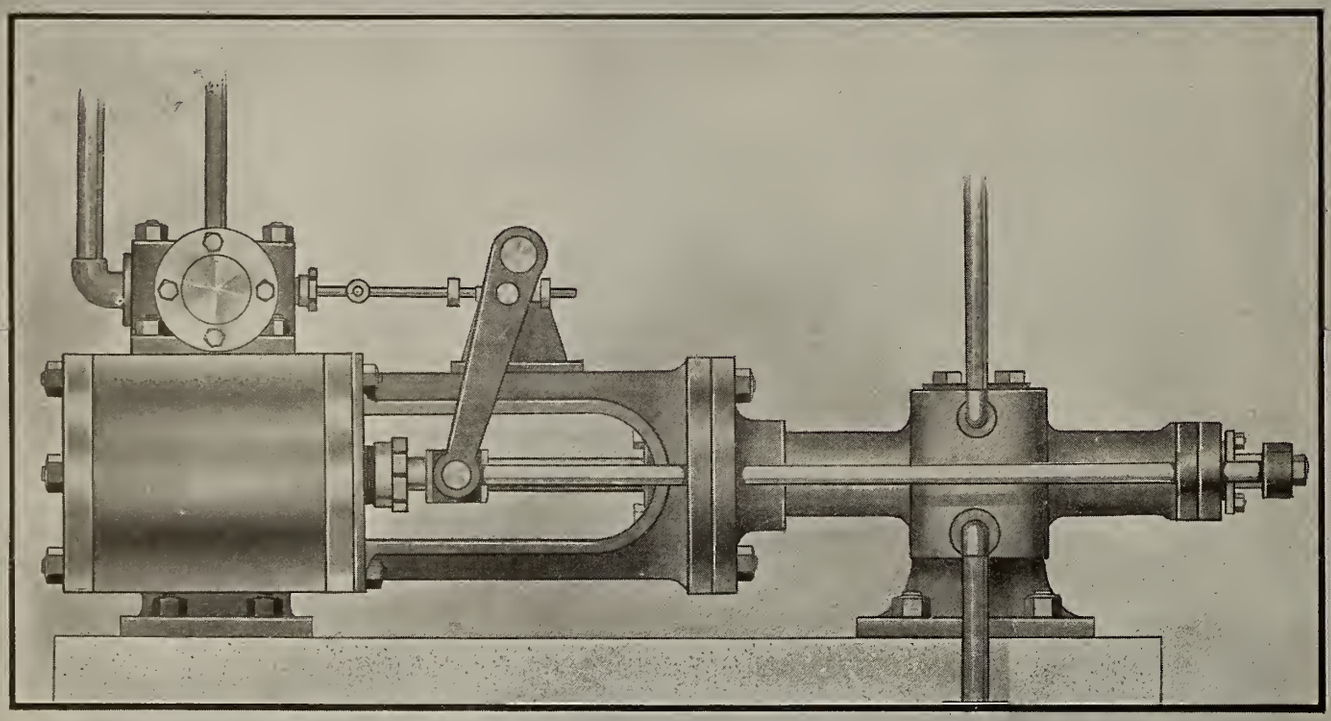
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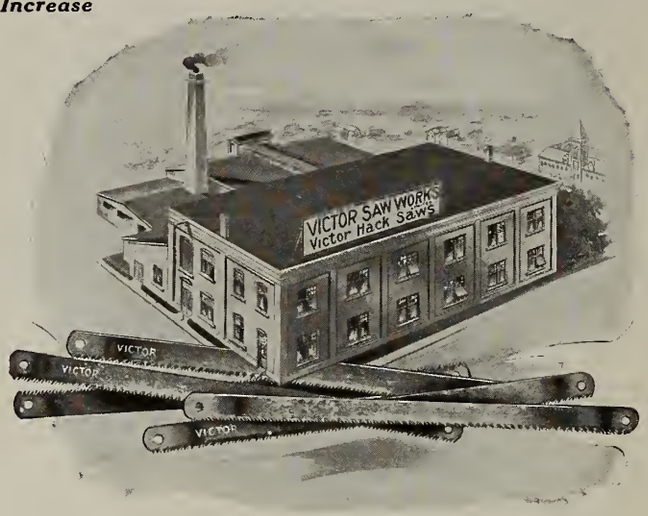
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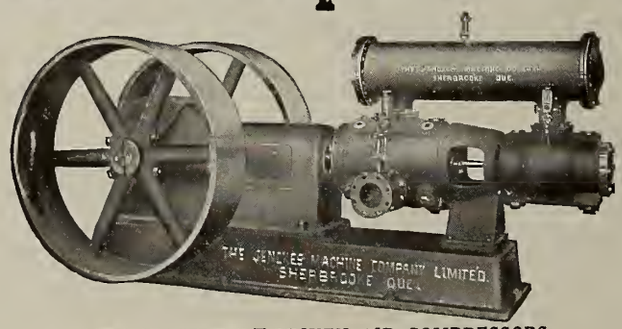
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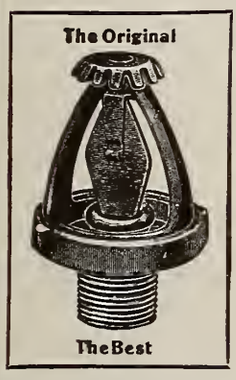
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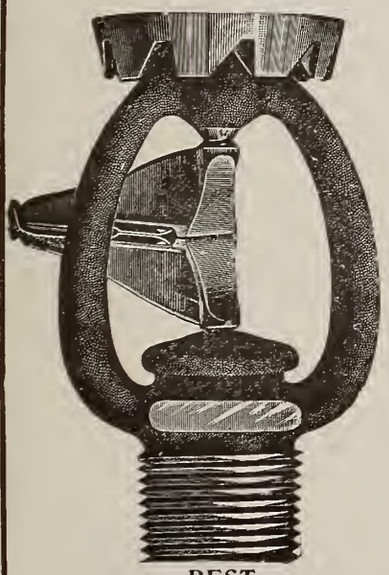


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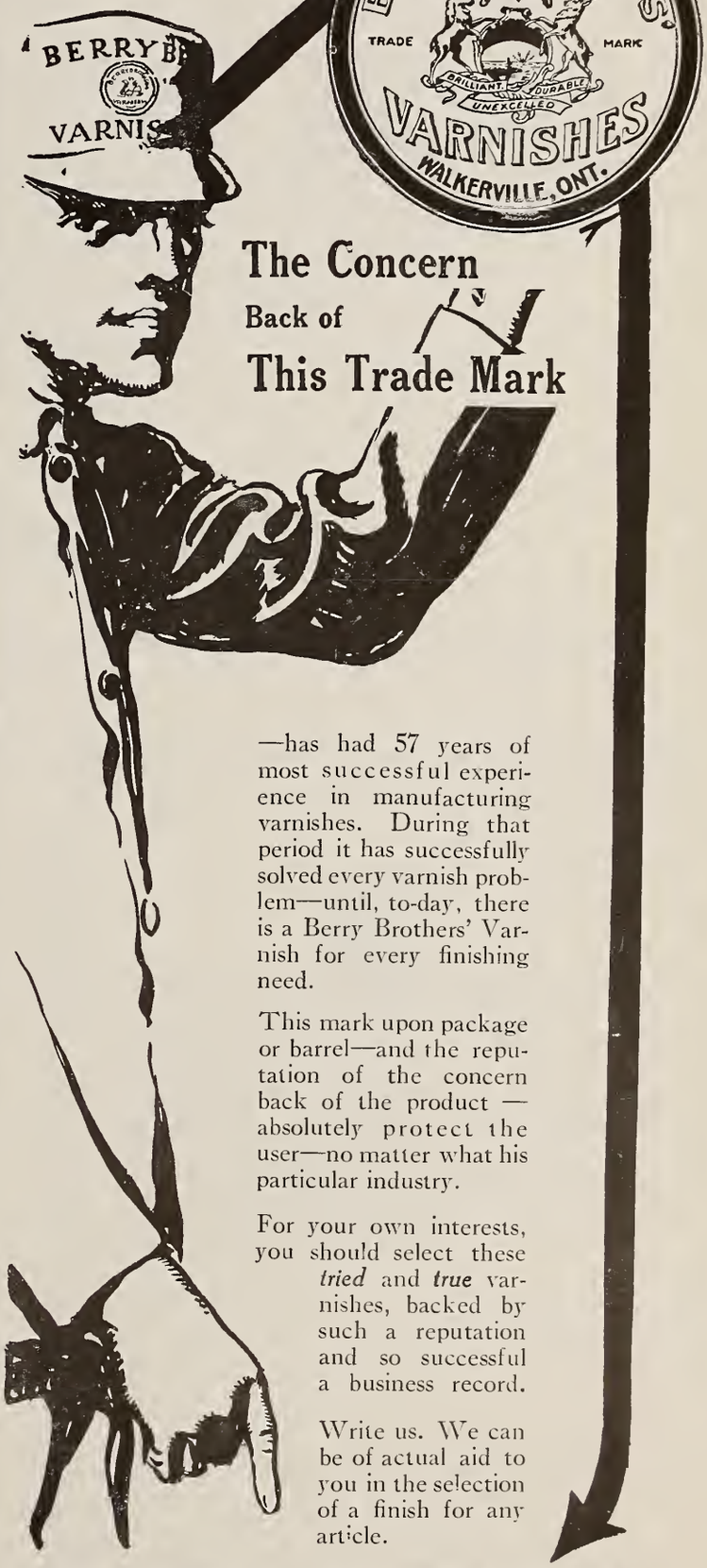
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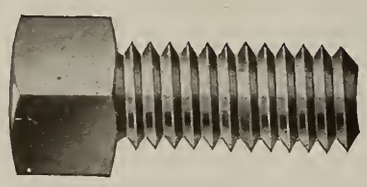
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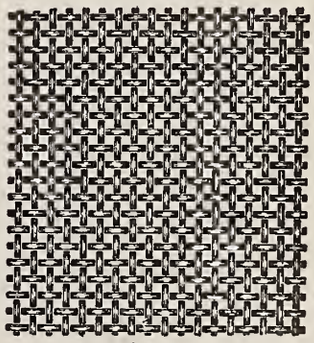
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NOTICE

to

Stationary Engineers

Everyone operating a Stationary steam plant of 50 h.p. or over in the Province of Ontario must hold a Certificate from the Stationary Engineers' Board. Anyone operating such a plant without a Certificate is liable to the penalties set forth in the Stationary Engineers' Act.

HON. JAS. S. DUFF
Minister of Agriculture

W. C. McGHIE
Chairman of the Board

NOTICE

The following are the Factory Inspectors for the Province of Ontario:

JAS. T. BURKE, Chief Inspector, Parliament Buildings, Toronto.
H. A. CLARK, 432 Woodman Avenue, London.
A. W. HOLMES, Parliament Buildings, Toronto.
ROBERT HUNGERFORD, Parliament Buildings, Toronto.
MISS MARGARET CARLYLE, Parliament Buildings, Toronto.
MRS. A. BROWN, Parliament Buildings, Toronto.
THOMAS KEILTX, 25 Russell Avenue, Ottawa.
S. J. MALLION, 214 Wellington Street, Stratford.
FRED KELLOND, 157 Wellington Street South, Hamilton.
H. J. TUTT, 13 Enderby Road East, Toronto.

Persons having business with any of the Inspectors will find them at the above address. **HON. JAS. S. DUFF**, Minister of Agriculture. Phone Main 5800.

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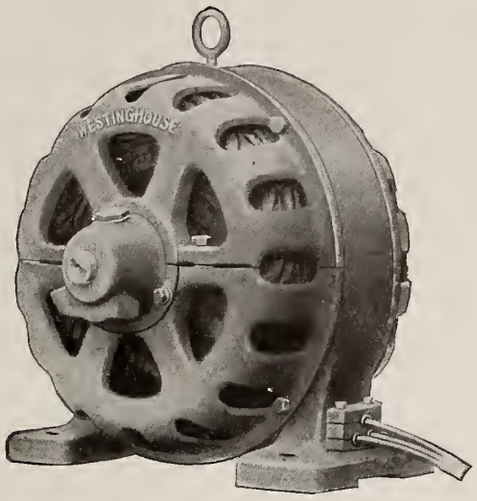
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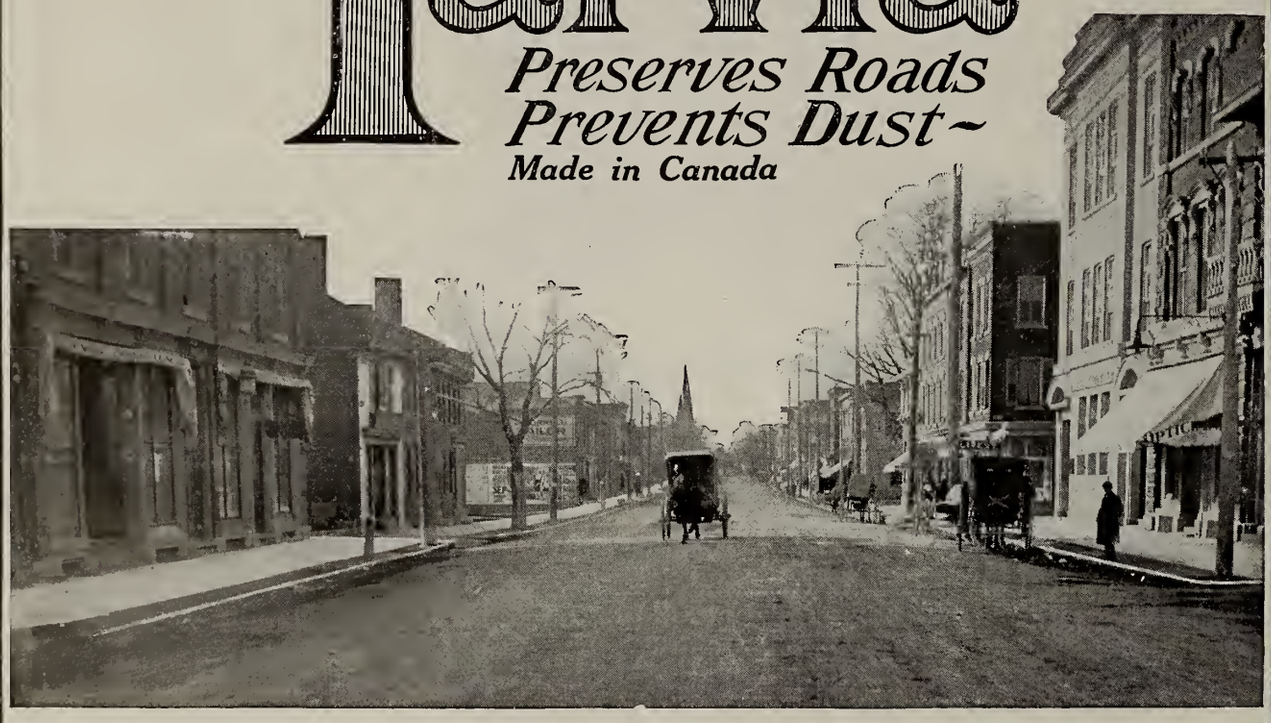
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IN 1910 Picton did what a great many towns have done. It laid an experimental stretch of tarviated macadam, consisting of one block on Main Street.

Four years later (in the Report of the Town Council meeting of April 20, 1914) appears the report of a Special Committee on street paving. This Committee had visited a number of neighboring cities and came back with the report that in view of the money to be expended, nothing was so good as the tarviated pavement which they had tried to the extent of one block on Main Street four years previously. The report said :—

> "The tarvia pavement laid on our Main Street in 1910 has given good satisfaction. Tarvia can be easily recoated every two or three years at a cost of less than 5c. per square yard and when so recoated is apparently as good as when first laid, and the stone used in its construction will be reprotected so that the pavement is practically indestructible."

In accordance with this Report the Council authorized the paving of 20,000 square yards with tarviated macadam.

The above photograph shows the old section still in good condition in the foreground with the new tarviated area on beyond.

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INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

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Increase of Manufacturers' Prices.

IF the manufacturers of Canada make a general advance in the prices of their goods with the deliberate intention to absorb the whole of the recent 7½ per cent. tariff increase, they will formulate a policy which will react disastrously upon themselves.

Such a course is certain to arouse hostility among those consumers who were of the opinion that the tariff was too high before the increase was made; and it will chill the warmth with which the remaining consumers have supported the policy of Protection.

Raising prices up to the new limit will operate directly against the "Made-in-Canada" campaign. The 7½ per cent. tariff increase gives the Canadian manufacturer an advantage over foreign competition. If he raises the price of his article 7½ per cent. he immediately loses that advantage. Consequently, the "Made-in-Canada" article which might be sold, is in the same danger of being replaced by the foreign article as it was in before the tariff increase was made.

Now is the time, under the shelter of slightly increased Protection, to encourage the habit of using Canadian goods in preference to foreign goods.

Raising prices also tends to diminish output. The buying power of Canadians at present is restricted and every addition to the selling prices of goods makes it more difficult for consumers to buy them. On the contrary, lower prices will allow a greater volume of sales, will diminish the consumer's hardship, will give more employment to workers and will tighten the grip of Canadian manufacturers upon their home market.

If the manufacturers will concentrate upon the problem of keeping the prices as nearly as possible at the old level they will create a permanent asset in the gratitude of hard-pressed consumers.

Consumers, however, must not hastily conclude that there will be no increase in the prices of manufactured goods. While any general advance, aiming at the unjustifiable absorption of the 7½ per cent. tariff increase cannot be too strongly opposed, it is absurd to argue that no prices should be advanced. Each article must be separated from any enveloping general policy and dealt with on its own merits. What are the items entering into its cost of production? Have they been increased? If they have, it is only fair that the price of the article should be increased. If they have not then the price of the article should stand.

It is indisputable that the cost of producing a considerable number of articles has increased. Imported raw material has risen 7½ per cent. in price through the tariff change which added 7½ per cent. duty to the finished product. As some manufacturers import practically all their raw material this added charge is a serious matter. Scarcity has caused a tremendous advance in the price of certain raw materials. Dyes, when they are obtainable, can only be purchased at enormously increased cost. Tin has advanced about 100 per cent.

In Ontario the tax on soft coal means a direct charge on the manufacturers of the province. Imported machinery and equipment have been advanced in price and a tax has been levied upon commercial paper. All these items and many more, enter into the cost of manufacture, and it is clear that, in cases where the cost of an article has increased, the selling price must increase in proportion or the article cannot be produced.

There is, in some quarters, a most unfair attempt being made to lay on the recent tariff measures the entire blame for increased prices in spite of the fact that in countries

where no tariff increases have been made, prices are rising. According to the *New York Annalist,* the average wholesale price of twenty-five food commodities, representing a theoretical family's food budget, which was 139 in 1913, 146 in 1914, now fluctuates around 154.

Scarcity, interruption to communications, shrinkage in production, and other allies of war are sending prices up all over the world. War always increases the cost of living. It would be strange if Canada should escape the general law. We cannot have it both ways. We cannot profit by war's high prices for what we have to sell and avoid war's high prices for what we have to buy.

Labor Member Attacks Made-in-Canada Campaign.

"THE biggest farce the human brain ever invented," was the description given to the "Made-in-Canada" campaign by Mr. Alphonse Verville, M.P. for Maisonneuve, during a speech he made recently in the House of Commons.

If Mr. Verville did not inflict a certain number of similar remarks annually on the public he probably would not be re-elected. His belief is that the more he abuses employers, the more support he will get from employees, or, in other words, "Yell loud enough and you will get the votes." This time, however, he has spiked himself. One of the chief reasons for undertaking the "Made-in-Canada" campaign was to give employment to thousands of idle workmen. As Mr. Verville is elected by the labor vote it should be difficult to explain to his constituents why he denounces the "Made-in-Canada" policy which is putting wages into their pockets.

Farmers Co-operate.

IN discussing the recent Saskatchewan Grain Growers' Convention, the *Farmer's Advocate and Home Journal,* of Winnipeg, says that its criticisms of public affairs are losing their former hostile, destructive tone and are assuming a co-operative constructive attitude.

"A few years ago," says this journal—"one need not go back to the first convention fourteen years ago—the conventions were marked by strong criticism of the other factions that make up the nation, and of the governments, both federal and provincial. No doubt much of this criticism was deserved, but to-day, while it would still be possible to criticize, the work of the convention is largely constructive. Instead of criticizing the governments for legislation in force, new legislation is suggested to meet the requirements of conditions under which farmers work. Instead of berating commercial interests the association is taking means through co-operation to secure more satisfactory trading conditions for its members. It has also committees studying financial and transportation problems."

Governing and administrating the affairs of a country is, after all, a business proposition, and a country, like a business, runs more smoothly when the partners sink their differences and work together than when they disagree and waste their energies in petty civil wars.

United States Population 100,000,000.

THE population of the United States will cross the 100,000,000 mark in April, according to the statement of an official connected with the Census Department. When it is considered that this population is greater than the combined populations of the United Kingdom, France and Belgium, the enormous possibilities of such a home market are apparent.

One hundred years ago, the population of the United States was approximately equal to the present population of Canada. One hundred years hence, our population, if the progress of the United States is repeated, will be one hundred million.

Conservation of the home market for their own farmers and manufacturers has been the constant policy of the successive governments of the United States throughout this period of astonishing expansion.

Conservation of the Canadian home market for Canadian farmers and Canadian manufacturers will do more than any other single agency to duplicate the United States expansion in Canada.

The Errors of Michael Clark.

DR. MICHAEL CLARK, M.P. for Red Deer, recently stated in the House of Commons that the war had proclaimed the National Policy to have been a palpable failure as a revenue producer and a builder up of industry. It is regrettable that Dr. Clark, who combines the gift of picturesque speech with an attractive personality, should be rapidly acquiring the reputation of being the most intemperate and inaccurate speaker in the House of Commons. His claim that the National Policy has failed to produce revenue is easily refuted by the returns of the Customs Department which show that, since 1879, when the National Policy was introduced, the customs revenue of the country has increased from $12,939,540 to $107,180,578 for the fiscal year ending March 31, 1914. That is, the customs revenue now provides about two-thirds of the total revenue raised by the Dominion Government.

His second statement that the National Policy has failed to develop the industries of Canada is also misleading and untrue. From 1890 to 1910, a period in which both Conservative and Liberal Governments adhered to the National Policy, statistics show the following enormous increases in the production of manufactured goods: food products, 223 per cent.; textiles, 148 per cent.; iron and steel, 298 per cent.; wood products, 153 per cent.; leather products, 157 per cent.; paper and printing, 235 per cent.; liquors and beverages, 259 per cent.; clay, glass and stone products, 152 per cent.; metal products, 452 per cent.; tobacco products 350 per cent.; vehicles, 334 per cent.; vessels, 98

per cent.; miscellaneous industries, 221 per cent.; hand trades, 1,411 per cent.

Our trade rivals, the manufacturers of the United States, have not the contemptible opinion of our National Policy which is entertained by Dr. Clark. In a special bulletin on foreign trade, published by the National Association of Manufacturers of the United States on March 1st, appears the following statement:—

"Were it not for its customs tariff the Dominion of Canada, so far as cultivation of trade therewith is concerned, would scarcely be looked upon by Americans as a foreign country. But, as the Dominion is a distinct and separate country from the Republic, the Government of the Dominion naturally aims not only to develop its own resources to its fullest extent, but also, through the influence of a protective customs tariff, to concentrate as much as possible the manufacture within its own borders of the goods which its people require. This devotion to a system of tariff protection on the part of Canada has resulted in the establishment of numerous industries by Canadians and has also induced a large number of American manufacturers to erect branches of their own factories in Canada in order to secure to a larger degree a share of the markets of the Dominion which have grown so rapidly within the past decade."

Dangers of Direct Taxation.

THOSE who oppose the Government's revenue raising measures offer as an alternative a direct tax on land.

The supporters of increasing land taxation are apparently unmoved by the recent statement of the Hon. Mr. White that for months past municipalities have been asking the Finance Department to secure them credit at the banks because they could not collect their arrears of taxes imposed on the property within their jurisdiction. They also seem to ignore the special legislation now being enacted in various provinces to suspend principal payments on property because of the multitude of owners who can do no more than pay interest and taxes.

The greatest support to the direct land tax theory comes from the Western provinces, where it has been put into effect in the form of a provincial tax amounting to $10 per quarter section on uncultivated lands owned by non-residents in the Province of Saskatchewan, and a provincial tax of ten mills on the assessed value of all uncultivated lands in the Province of Alberta. How a further extension of the direct land tax theory would affect the West is indicated in an editorial which appeared recently in the Manitoba *Free Press*. The *Free Press* quotes the following extract from a North Dakota paper:

"It is believed that, as a result of the war tax on land imposed by the Canadian Government, a number of former Dakota farmers who went to the British Northwest will be compelled to return to the United States. Information has been received that the tax will amount to about $500 for each farm of 160 acres, which in the case of many of the former residents of the two Dakotas would practically amount to confiscation."

The *Free Press* easily proves that this is an exaggeration but it should also lecture its readers in the Western Provinces on the danger of substituting direct taxation for the customs as a means of raising revenue.

It is claimed that similar reports are being circulated by land companies and other interests in the Boundary States with the hope of discrediting the Canadian West as a future home for United States settlers. It is only a few years ago that the great northward trek of a most desirable class of United States farmers began, and it is to be feared that the imposition of heavy direct taxes on land would tend to discourage similar immigration and might possibly encourage a considerable degree of emigration.

Manufacturers and Alien Patents.

BECAUSE only a few Canadian manufacturers have availed themselves of the opportunities afforded them by the War Measure Act to acquire patents held by alien enemies, the charge that they lack enterprise has been made by some persons who have not fully understood the difficulties of the situation.

A considerable number of these patents might have been secured from the patentees before the war, but this was not done for the reason that manufacturers were not convinced that their investment would yield profitable returns.

The most valuable German inventions patented in Canada are those controlling the production of synthetic drugs and dyestuffs. Few Canadian manufacturers at present possess the capital or can command the labor necessary to carry on these delicate and complicated processes to commercial advantage. According to patent experts, in the case of some German patents, more than a couple of years old, there is doubt as to their validity, owing to non-manufacture and sometimes to unlawful importation. If patents are liable to become void, manufacturers will hesitate to invest money in enterprises which are founded on the possession of these patents. Lastly, the effect of the termination of the war on acquired patents is by no means certain.

Consequently, manufacturers, while they have not failed to investigate what advantages they can derive from the Government's legislation in regard to alien patents, have adopted a conservative attitude which the circumstances seem to justify.

Make Those Who Cause Fires Pay.

THERE is a growing feeling in Canada and the United States that those who cause fires through carelessness or wilful neglect should pay for the resulting damage.

In Europe, laws placing responsibility for and assessing damages caused by fires have been in existence for a hundred years.

Hard times are forcing us to economize, and as Canadians suffer more fire losses per capita than any other civilized people, we could very profitably add a curtailment of our fire bill to our policy of retrenchment.

We all help to pay for fires. If farm buildings, stores,

railway buildings, factories and workmen's houses are constantly being burned, the loss increases the cost of production and goes on to consumers in the shape of higher prices for goods.

Estimating on a per capita basis, the average Canadian family of five pays between fifteen and twenty dollars annually towards the national fire bill.

Fire prevention campaigns do much and the co-operation of firemen as inspectors of premises would do more; but a fine is a sharp educator, which quickens the perceptions of the indolent more readily than volumes of written or verbal advice.

Why should there not be laws punishing carelessness in regard to fire? There are thousands of convictions in this country registered annually against people who drive too fast in automobiles, leave ice on their sidewalks or maintain nuisances dangerous to health.

Why should those whose dirty chimneys, defective wiring or neglected furnaces endanger lives and prosperity escape?

The enactment of such legislation is strongly advocated by the National Fire Protection Association of the United States, which has just published the following recommendation from its Committee on Public Information:—

"Revised building codes, huge, expensive and efficient fire departments, enormous expenditures for water supplies and all other physical means have failed, and will fail, to check the fire waste so long as the carelessness and indifference of the American people respecting it remain uncorrected.

"In view of the impoverishment of the nation by this reckless and unceasing waste, and the failure of all other efforts to interest the public in measures for its own economic salvation, this committee advocates the early enactment in all the States of a law that shall compel individual attention to this vital matter, by imposing legal liability for the results of carelessness and neglect."

As our per capita fire losses are greater than those of the United States, a proposal for similar legislation in Canada would probably receive effective support.

A Dwindling Argument.

THE case presented to the Dominion Railway Board by the railways asking for leave to increase their freight rates is being gradually undermined by the steady upward climb of gross earnings.

The following table, compiled by INDUSTRIAL CANADA from the published statements of railway earnings, shows the percentages of decrease in the gross earnings since October, 1914, from the gross earnings in the corresponding periods of 1913 and 1914:

Months	C.P.R.	G.T.R.	C.N.R.	All Three.
November	40	17	38	32
December	37	13	41	30
January	23	10	38	24
February	12	6	17	12
March (1st week)	13	5	11	10

The railways should hurry or presently they will find no decreases—possibly increases. With gross revenues showing gains over last year, it will be difficult to secure permission to advance their rates.

The British Preference.

FREE TRADERS and those who want to lower our tariff oppose the recent increase of five per cent. in the duty levied on British goods entering Canada on the ground that such action is "particularly objectionable in the fact that, instead of favoring, it is placing extra barriers against Great Britain's trade with Canada."

The fact is carefully ignored that a measure which increases the general tariff by 7½ per cent. and the British Preference by only five per cent. gives the British manufacturers an advantage of 2½ per cent. greater than that which they enjoyed before the measure was put into effect.

For example, take the case of an article formerly dutiable under the general tariff at thirty per cent. The advantage of the British manufacturer was as follows:

Foreign article paid	30 per cent.
British article paid	20 per cent.
Advantage of British over foreign article	10 per cent.

The new regulations alter the situation as follows:—

Foreign article now pays 37½	per cent.
British article now pays 25	per cent.
Advantage of British over foreign article now 12½	per cent.

Our three tariffs—British Preference, Intermediate and General Tariff—are relative, and, if the relation is maintained when a general increase is made, it is obvious that those enjoying the lowest tariff receive an advantage over those affected by the higher tariff.

Concern for the manufacturers of the United Kingdom is not the chief motive actuating those who oppose the tariff measures. They see an opportunity to strike another blow against the policy of Protection, which they hope will be a popular blow, because the economic aspect of the case is likely to be overlooked in the military fervor of the moment.

After many years adherence to the National Policy, during which the industries of Canada were taking root, a series of attacks began upon Protection, which are still in progress. The establishment of a British Preference of 33 1-3 per cent., the proposal to increase it to fifty per cent., Reciprocity, "Free Food," "Free Wheat," are the chief steps in the gradual growth of the Free Trade and "Tariff for revenue only" propaganda. Demands for free trade with the United Kingdom and, finally, free trade with all other countries, are openly and tenaciously advo-

cated at the present time in spite of the fact that there is no disposition on the part of those countries to lower their tariff walls against Canadian goods.

"Hew down the tariff against British goods and then the tariff against foreign goods" is their policy, and they persist, in spite of the frequent demonstrations, that the majority of the farmers, the manufacturers, the industrial workers and other classes, who realize the benefits of Protection, will not have such a policy adopted by any government in this country.

That our tariff against British goods is a contradiction of our loyalty is a most unfair inference. The erection and maintenance of a protective tariff against the manufactured goods of Great Britain has been in accord with the measure of self-government which has been fully and freely granted to Canada by the British Government; and other self-governing dominions such as New Zealand, Australia, Newfoundland and South Africa have also erected and maintained protective tariffs against the goods of the United Kingdom without remonstrance from the Imperial Government. Australia has recently made a general increase in her tariff, including the duties on goods coming into that country from the United Kingdom, without such action being considered "particularly objectionable." Moreover, the United Kingdom maintains a high customs tariff on many articles without giving a preference to the colonies.

There is no disputing the fact that Canadian manufacturers cannot pay Canadian wages, Canadian rents, Canadian insurance and Canadian prices for raw material and compete in producing a great number of articles with British manufacturers, who pay British wages, British rents, British insurance and British prices for raw material, unless Canadian goods have adequate Protection. This is the situation which existed before the war, and the war has not changed it.

About a hundred years ago the Imperial Government abandoned the old Colonial policy of concentrating manufacturing in the British Isles and confining the energies of the colonists to the production of raw materials. Those who try to resurrect this policy of surrendering our fiscal autonomy are, curiously enough, the strongest opponents to any suggestion of surrendering our political autonomy.

Surely, if we value the right to make our own laws, we should not throw away the opportunity of making our own goods.

The Duty of the Banks.

IN pointing out that the success of the "Patriotism and Production" Campaign depends to a great extent upon the co-operation of the banks, we would like to emphasize the remarks of Mr. Arthur W. White, of The George White and Sons Co., Limited, when he recently retired from the presidency of the Canadian Club, of London.

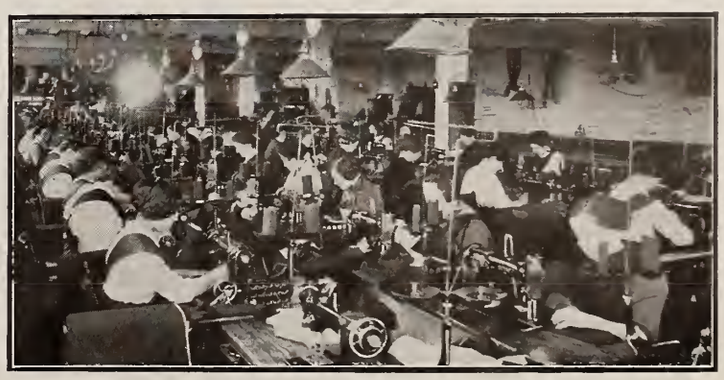
"The Made-in-Canada Campaign, and the demand for increased production cannot be successful without the help of the financial institutions. Agriculturists, as well as manufacturers, will need more money the coming season than they have heretofore. The area under crop will be greatly increased. This means money to put it in and money to harvest it, and money to the manufacturers to furnish the machinery and supplies required.

"The financial institutions of Canada are in a position to meet every legitimate demand. According to the *Financial Post*, since 1913 savings deposits in Canada have increased nearly $100,000,000, while commercial loans have decreased over $100,000,000. The chartered banks of Canada have out on loan only 79 per cent. of their deposits. Never before has the ratio been so low. When savings deposits increase, and commercial loans decrease, it must mean easier money. Surely this is the time when the banks should show commercial patriotism. A general policy cannot be adopted in the present situation. Individual investigations should be insisted on, and legitimate industries should be granted legitimate lines of credit.

"I look for this spring to open up the greatest trade year that Canada has even seen, and we must be ready for it. If money cannot be had to increase production, the Made-in-Canada cry is futile. Canadians must be ready and have the goods to sell, otherwise the great demand of the coming summer will be supplies from across the border."

The bank statements show that dividends of eight, ten and twelve per cent. are being earned and paid. Bonuses are not lacking or weighty addition to reserve, depreciation and other funds. Although sad havoc has been wrought to the dividends of most industrial companies, there has been no widespread criticism on the part of manufacturers towards the evident and continued prosperity of the banks, because it was felt that the banks, being the backbone of our financial system, and being responsible to depositors, must play safe.

But a great national effort to increase production is being made; and, if the banks fail to adopt not only usual, but also extraordinary methods of co-operation, there will develop a strong feeling that they are not fulfilling the purpose for which they were established, and that their policy is to conserve their own interests without regard to the needs of the country in a great crisis.



Northern Shirt Company, Winnipeg

WESTERN GRAIN-GROWING HISTORY AND THE 1915 CROP*

By J. T. STIRRETT

THE enormous importance which attaches to the 1915 Western crop is already drawing our attention to the possibilities of good or ill which the summer will bring. A bumper crop in the present crisis would do much to restore our prosperity; a bad crop would plunge us deeper into financial depression. The past is not always a guide to the future, but it is almost the only key to the future, and it is interesting to review the history of grain growing in the West in order to investigate our chances for success or failure.

Never a "Failure."

It is important to notice that the word "failure" has been inaccurately used to describe our Western crops. There has never been anything approaching failure. The nearest thing to that calamity in all our Western wheat and oat growing was half an average crop of wheat and oats in Manitoba and Saskatchewan in 1900. We have never even suffered a loss of half an average crop of both wheat and oats in all three provinces of Manitoba, Saskatchewan and Alberta in any one year of their grain-growing history. Our worst results have been: wheat crop below the average in all three provinces, 1904, 1907, 1908 and 1910; wheat below in Manitoba and Saskatchewan, 1898 and 1900; wheat below in Manitoba and Alberta, 1903 and 1909; wheat half average crop Manitoba and Saskatchewan, 1900; oats below in all three provinces, 1900, 1907 and 1910; oats below in Manitoba and Saskatchewan, 1898; oats below in Alberta and Saskatchewan, 1902, 1903 and 1904; oats half average crop in Manitoba, 1889, 1900, Saskatchewan, 1900.

What is meant by an average crop is illustrated by the following table based on the statistics covering wheat and oat growing in the three provinces from the beginning:

	Wheat.			Oats.		
	High.	Low.	Average.	High.	Low.	Average.
Manitoba (30 years)	28	8	18	48	15	36
Saskatchewan (16 years)..	25	9	18	47	16	34
Alberta (16 years)	25	16	19	44	24	36

The following tables show the records in detail for the three provinces. For the sake of brevity the total yield is expressed in millions of bushels and the average yield per acre without decimals. Thus a total yield of 5,837,568 bushels appears as 5, and an average yield per acre of 21.63 appears as 21.

Barley, fall wheat and flax statistics are withheld, as these crops are not so important as wheat and oats; moreover, the conclusions drawn from wheat and oats statistics can be applied generally to them also. It should be noted that, while the statistics for Manitoba begin in 1883, those for Saskatchewan and Alberta date only from 1898, following the incorporation of those provinces.

Records of the Province of Manitoba.

	Wheat.		Oats.	
	Total Yield,	Yield	Total Yield,	Yield
Year.	Million Bushels.	Per Acre.	Million Bushels.	Per Acre.
1883	5	21	9	44
1884	6	20	4	30
1885	7	20	6	40
1886	5	15	4	25
1887	12	28	7	46
1888	No statistics available.			
1889	7	11	3	15
1890	14	19	9	40
1891	23	25	14	48
1892	14	16	11	35
1893	15	15	9	25
1894	17	17	11	28
1895	31	27	22	46
1896	14	14	12	28
1897	18	15	10	22
1898	25	17	17	33
1899	27	17	22	38
1900	13	8	8	20
1901	50	25	27	40
1902	53	26	34	47
1903	40	16	33	38
1904	39	16	36	38
1905	55	21	45	44
1906	61	19	50	43
1907	39	14	42	34
1908	49	17	44	36
1909	45	17	50	37
1910	39	13	42	28
1911	61	18	73	45
1912	58	20	87	44
1913	62	19	81	41

Records of the Province of Saskatchewan.

	Wheat.		Oats.	
	Total Yield,	Yield	Total Yield,	Yield
Year.	Million Bushels.	Per Acre.	Million Bushels.	Per Acre.
1898	4	17	1	23
1899	6	18	2	30
1900	3	9	1	16
1901	11	25	5	44
1902	13	22	5	30
1903	15	19	9	32
1904	15	17	10	31
1905	26	23	19	42
1906	37	21	23	37
1907	27	13	23	29
1908	50	13	48	27
1909	90	22	105	47
1910	72	15	63	30
1911	96	18	98	45
1912 107		19	107	44
1913 112		19	110	41

Records of the Province of Alberta.

	Wheat.		Oats.	
	Total Yield,	Yield	Total Yield,	Yield
Year.	Million Bushels.	Per Acre.	Million Bushels.	Per Acre.
1898	1	25	1	44
1899	1	23	2	42
1900	1	19	2	33
1901	1	24	4	40
1902	1	18	3	31

* The statistics on which the tables in this article were based were specially furnished by Mr. W. W. Cory, C.M.G., Deputy Minister of the Interior.

Year.	Wheat. Total Yield, Million Bushels.	Wheat. Yield Per Acre.	Oats. Total Yield, Million Bushels.	Oats. Yield Per Acre.
1903	1	18	5	31
1904	1	16	5	31
1905	1	21	9	39
1906	2	23	13	39
1907	2	18	9	30
1908	4	18	15	36
1909	6	18	24	35
1910	5	12	12	24
1911	15	20	27	41
1912	17	18	37	38
1913	19	19	49	39

An analysis of the above shows that in any one year there has been only one half failure in wheat in Manitoba and Saskatchewan, one half failure in oats in Manitoba and one in Saskatchewan, these occurring in different years. Alberta has never even suffered a half failure in either wheat or oats. Instances where the yield fell as far as 25 per cent. below the average crop, or what might be called quarter failures, were also few and were widely scattered.

The half failures and quarter failures in detail were as follows:—

Province.	Wheat. Half Failures.	Wheat. Quarter Failures.	Oats. Half Failures.	Oats. Quarter Failures.
Manitoba	1	2	1	4
Saskatchewan	1	2	1	2
Alberta	0	1	0	1

Conclusions.

The above analysis seems to warrant the following conclusions:—

1. That there has never been a "failure."

2. That in only one year did the yield fall to a half average in two provinces together, and never in three together.

3. That two poor crops rarely come together, the only examples of consecutive crops substantially below the average being: wheat—Manitoba, 1896 and 1897; oats—Manitoba, 1893 and 1894; and wheat—Saskatchewan, 1907 and 1908. Therefore, the 1915 crop, following the doubtful crop of 1914, is more likely to be large than small, if the general law prevails.

In conclusion, attention is drawn to the following amazing increases in the total yields since the beginning of Western grain growing:—

Provinces.	Crops.	Increases.
Manitoba	Wheat	From 5 to 62 millions.
	Oats	" 9 " 81 "
Saskatchewan	Wheat	" 4 " 112 "
	Oats	" 1 " 110 "
Alberta	Wheat	" 1 " 19 "
	Oats	" 1 " 49 "

Surely these figures must sustain our faith in the productive powers of the West.



Mercury Mills Limited, Hamilton, Ont., Manufacturing Underwear and Hosiery for the War.

THE FEDERAL TRADE COMMISSION OF THE UNITED STATES

A Body with Wide Powers of Supervision over Manufacturers

CONSIDERABLE interest is being manifested, not only in the United States but in Canada, in the work soon to be undertaken by the new Federal Trade Commission of the United States. In preparation for this work, the old Bureau of Corporations of the Department of Commerce, which has been legislated out of existence and the tasks of which have been committed to the Commission, has been preparing a mass of data.

Under the Act creating the Commission, which bears the name of Senator Newlands, of Nevada, as its author, the Commission is authorized to require corporations subject to its jurisdiction to make annual or special reports, or both, in such form as may be prescribed by the Commission, and to make written answers to specific questions regarding the organization and management of their business or their relation to other corporations, partnerships or individuals. Furthermore, the Commission is authorized to classify such corporations and to make rules and regulations for the conduct of business of corporations.

Examined 90 Per Cent.

With this in mind, the Bureau of Corporations has prepared its data for the Commission, and, taking as a basis the value of output of the industries of the United States, about 90 per cent. of these industries were examined in a general way by the Bureau, so as to have material at hand for a brief, general survey by the Commission. A somewhat more comprehensive survey of about twenty of the leading industries of the United States has likewise been made by the Bureau, with a view to furnishing the Commission with general facts of processes of manufacture, organization and dominant financial control in the respective industries. In addition, a card index of directors of the principal industrial, railroad and public utility corporations, insurance companies and banks has been completed for the same purpose. There are approximately 6,500 corporations in the United States, exclusive of steam railroads, banking and other financial corporations and corporations under the jurisdiction of the Interstate Commerce Commission of the United States which have a capital stock or bonded or other indebtedness amounting to $1,000,000 or over engaged in interstate commerce. All of these come under the new Federal Trade Commission. Approximately one-third of them have voluntarily, or upon request, furnished reports as to their financial condition, organization and other similar facts, for the Bureau, that the Bureau may turn them over to the Commission.

The Commissioners.

This is what has so far been done, speaking in a broad way, toward beginning the work of the Commission. Under the law, there will be five Commissioners, not more than three of whom are to be of the same political party, to be appointed by the President of the United States, "by and with the advice and consent of the Senate." The first commissioners appointed are to continue in office for terms of three, four, five, six and seven years respectively, but their successors are to be appointed for terms of seven years. No commissioner shall be engaged in any other business, vocation or employment. Any commissioner may be removed by the President of the United States for inefficiency, neglect or malfeasance in office.

The Commission is to have quasi-judicial functions. In Section 5 of the Federal Trade Commission Act, the following very important provision of declarative law is stated:

"That unfair methods of competition in commerce are hereby declared unlawful."

The Act provides that the Commission is empowered and directed to prevent persons, partnerships and corporations, except banks and certain common carriers, from using unfair methods of competition and establishes the procedure by which this may be done. In addition to the substantive provisions contained in the Federal Trade Commission Act with reference to unfair methods of competition, the so-called Clayton Act, recently enacted to amend the Sherman Anti-Trust Law, contains certain prohibitions, the enforcement of which is confided to the Federal Trade Commission as to corporations under its jurisdiction.

As to "Price Discrimination," that is prohibited in certain cases where the effect may be to lessen substantially competition or tend to create a monopoly in any line of commerce.

Tying Contracts and Holding Companies.

As to "Tying Contracts," they are prohibited when as a condition of sale or lease of commodities the seller or lessor exacts from the purchaser or lessee an agreement that he shall not use or deal in other commodities except those furnished by the seller or lessor—where the effect may be to lessen substantially competition or tend to create a monoply in any line of commerce.

As to "Hold Companies," these so-called holding companies or the ownership by one company of the stock of another are prohibited where the effect may be to lessen substantially sompetition between the companies concerned or to restrain interstate commerce, or tend to create a monopoly.

As to "Interlocking Directorates," two years after the enactment of the law these are prohibited in certain cases, and in particular with respect to corporations having more than $1,000,000 capital stock and surplus, other than certain banks and common carriers, wherever they are or shall have been therefore by virtue of their business and operations competitors, so that the elimination of competition by agreement between them would constitute a violation of any of the provisions of any of the anti-trust laws.

Powers and Penalties.

The powers of visitation and subpoena are conferred upon the Commission. No person is excused from testifying or producing evidence before the Commission on the ground that it might tend to incriminate him. Penalties of fine and imprisonment are provided. Whenever any person, etc., is believed by the Commission to have been violating the provisions of the Clayton Act or the Federal Trade Commission Act, and whenever the Commission believes that its intervention would be to the interest of the public it shall serve a notice on the party complained of and through successive steps in the courts, which are outlined in the new laws, remedy is expected and provided for. Any party required to cease from using unfair methods of competition or from violating the provisions of the Clayton Act may obtain a court review, but the judicial review of the orders of the Commission thus provided for is what has been sometimes called a "narrow review." That is to say, the Commission's conclusions of fact are conclusive, supported by evidence.

BANKS AND MANUFACTURERS' ACCOUNTS

By H. M. P. ECKARDT

THE eleven pamphlets or lessons on Bank Organization and Management, written by me for the Shaw Correspondence School, are addressed primarily to bankers. The different classes of customers—farmers, retailers, wholesalers, manufacturers, etc.—are taken in turn, and in case of each there is a discussion of the best methods of conducting or operating the accounts. With the idea that it might be interesting to the manufacturers as a class to have a résumé of the rules and principles laid down for the handling of manufacturers' accounts, the Editor of INDUSTRIAL CANADA has invited me to present some of the outstanding features of Pamphlet No. 8, of the above series, which is entitled "Manufacturers' Accounts."

Conditions of Credit.

At the outset, in order to show under what conditions a manufacturer might be entitled to a full line of credit at his bank, a set of twenty rules which appeared in some of the financial journals over a year ago were used. These rules are important enough to be reproduced in full. They are:—

1. When a full, complete and honest statement of his affairs is made to his banker, and when he co-operates in its verification;
2. Who maintains his account at one bank and does not divide it among several;
3. When the business occupies a legitimate field;
4. Where a permanent demand exists for the article manufactured;
5. When healthful competition exists which yields legitimate profits;
6. When patents and patterns have a real value;
7. When the business is well located where production is economical;
8. When the applicant for credit is an experienced man and has been engaged in business over an appreciable length of time;
9. When the accounting system clearly discloses the exact condition of affairs at all times;
10. When the one seeking credit is well spoken of by others in the same or kindred lines;
11. When the relations between management and employees are satisfactory;
12. When enquiries regarding the uses of the borrowed money are frankly answered;
13. When an adequate balance of from ten to twenty per cent. of credit line is maintained at the bank;
14. When no attempt is made to overdraw the account;
15. When stocks and goods are made up of live and moving inventories;
16. When the credit asked for is not in excess of the *bona fide* capital paid in by the owners of the business;
17. When depreciation of machinery and buildings is regularly charged off;
18. When there is a good lot of quick assets, and when the amount requested is not in excess of fifty per cent. of the market value of these quick assets. (Quick assets consist of cash, bills and notes receivable, accounts receivable and merchandise);
19. When the management of the company is competent and aggressive and of high moral standing and business integrity.
20. When past obligations have been promptly met and where indebtedness is fully paid once each year.

Making a Loan.

These rules are taken as preliminary, applying when the banker is considering whether the applicant is properly entitled to bank credit. Assuming that the question is settled in the affirmative, the banker then proceeds to consider the disposition which the borrower will make of the proceeds. The funds of the bank should go to buy raw material, pay the wages and other expenses of manufacture. It is not proper to use them for purchasing machinery or other mill equipment, or for making extensions of plant. The manufacturer should do this with his own capital or profits. It is usually done through reinvestment of profits. And in actual practice the bank is often asked for short loans to meet bills for machinery, etc., the borrower's intention being to pay the loans at maturity, or to include them when making the annual clean-up of direct advances. From the banking point of view one of the principal dangers in manufacturers' accounts, the money lent for current purposes, may be diverted into permanent forms. To guard against this the banker is on the watch lest the manufacturer allows a temporary loan for machinery or building purposes to run past the end of his season, or lest he fail to clean up his account annually, as is desired by the bank.

Logging and Lumbering.

Next in the course of the lesson the particular circumstances applying to two of the principal Canadian industries are discussed, under the head of "Logging and Lumbering Accounts" (including pulp and paper mills), and "The Big Flour Milling Companies." Space does not permit a detailed reference to this section. It is pointed out that what are generally referred to as lumber accounts are divided into two classes—those known as timber and logging companies, and the sawmillers. These accounts are usually very large and the bank's advances may have to run for a full year; so they are usually handled by the larger banks.

The requirements are, in case of the timber firms, that the partners shall be experienced men with thorough knowledge of the business. With regard to capital, they are required to own their limits, with all improvements, free of encumbrance. The security for the advances may consist of the limits and the logs.

In case of the lumber accounts it is required that both the limits and the saw-mill shall be owned clear of encumbrances. More capital is thus needed—"just so much more as is required to build and equip the mill and the adjoining storage grounds," to quote from George Hague's work on banking. There is also perhaps a greater need of expert knowledge of the lumbering business.

Flour Milling Credit.

In case of the flour milling companies it is required that the borrower be possessed of capacity and experience and that his reputation for prudence be well established. Also it is necessary as a rule that he own his mill and its equipment free from encumbrance. A considerable proportion of the business of flour milling is in the hands of large corporations, the stock holding of which may be scattered over several provinces. One of these corporations may possess several great mills and scores of elevators at interior points. The mills and elevators are provided through the issue of stock, common and preferred, and through sale of bonds. In

dealing with such companies the banks, of course, are obliged to take the peculiar circumstances of each company into account.

One of the most important features of manufacturing accounts is that the bank will be required in many cases to make large direct loans, on no other security than the names of the parties engaged in the business. When a customer's liability consists entirely of trade bills made or accepted by parties who are good for their engagements, even though the customer himself meets with disaster the trade bills will all run off in due course and the bank will suffer no loss. But when the bank's connection with its customer is through large direct loans it is more vitally interested in the success or failure of the enterprise in which he is engaged. This makes it necessary for the banker to give very special attention to the question as to whether the industrial venture of his customer is likely to succeed or fail. In case of practically all lines, capability and experience must be possessed by the intending borrower. Then would come the question of capital. The bank cannot properly be asked to put any of its money into the mill or plant—for if the enterprise proves unsuccessful, this property will perhaps be valueless or next to valueless. In the bank's hands it would likely be worth only a small fraction of the cost.

Locating the Plant.

After the question of capital is satisfactorily settled, others of equal importance press forward. There is the matter of the location of the plant. Is the business well located where production is economical ? Here the question of power comes in. Has the concern a good water power, can it get electrical power at low rates, or can it get good coal laid down at reasonable prices ? If the power can be obtained on an economical basis the chances of success will be improved and the bank's loans will be more likely to be safe.

With regard to plant and equipment it is pointed out that the location of the plant and the suitability of the machinery and other equipment are important matters. In some lines of manufacture it is absolutely necessary that all the machinery shall be right up to date. Unless it is so the goods which are produced cannot be sold. In other lines the requirements are not so peremptory in this respect. It would be quite possible for the manufacturer to carry too far the policy of having up to date machinery with the very latest improvements. That might be so if the cost of the whole were entirely out of proportion with the value of his annual output—in other words, the business in hand and in prospect might be too small to give an adequate return on the capital so invested. The bankers are obliged to use their judgment in this regard in each case presented to them.

Regarding Raw Material.

With reference to raw material, it must be seen to that the manufacturer can rely upon getting an ample supply at low cost—the ideal condition of affairs being that whereunder a plentiful supply is to be found right at the door of the factory.

In taking into account the question of labor supply it is always remembered that this matter is of much consequence to many industries. To some industries it is so important as to compel them to locate in the largest cities.

On arriving at the question of the market for the output, it is found to be one of the most complicated of the lot. It is affected by numerous matters, such as rail and water carriers' freight rates, customs duties on imports, changes of fashion, and others. The manufacturer will be in a better position for selling his output in the face of strong competition if his plant is so located as to enable him to distribute his products in an economical manner.

Enduring Competition.

Another point upon which bankers usually insist is that their manufacturing customers shall be able to stand up under healthful competition. If a customer is supported by adventitious aid of one kind or another the banker must consider whether his loans would be safe if such aid were withdrawn.

A very important consideration is that of depreciation of machinery and buildings. To insure that this will be properly done by the customer a good accounting system is necessary. If depreciation is not deducted annually, it will probably come to pass that the capital account will be burdened with the cost of replacing worn-out machines; or if that does not happen the profits of some particular years may be almost wiped out by heavy expenses for replacements.

In dealing with manufacturing customers the banker never loses sight of the question of working capital. Through studying the annual statements, and by other means, he ascertains if possible whether the customer is steadily augmenting this important item of his resources, or whether he is drawing it down to a dangerously low level. More than is generally believed, the status of the credit depends on what is happening in regard to the customer's working capital.

Re PROVINCIAL WAR TAX—ONTARIO.

For the purpose of providing for the deficiency in the Ontario Provincial revenue a special bill has been introduced by Mr. McGarry, the Provincial Treasurer, imposing a special war tax on all rateable property of one mill on the dollar. Rateable property includes assessment for real property, income and business or other assessment made under the Assessment Act. In collecting the tax the machinery of the present Assessment Act is to be employed by adding to the collector's roll a separate column to be designated "Provincial War Tax." Where collectors' rolls have already been prepared for 1915, the new tax is to be included in the general ratio of taxation. The only exemption from the Act are those obtaining in favor of the Crown, etc., in the Assessment Act, although special provision has been made empowering municipalities by by-law to exempt property of those engaged in active military or naval service. The amount of every such exemption granted, however, is to be raised and collected upon the rateable property in the municipality.

It is expected that the new tax will raise a revenue of over $2,000,000.



Northland Knitting Co., Winnipeg, Busy on War Orders

HOW A GREAT UNITED STATES BANK IS ASSISTING ITS COUNTRY'S MANUFACTURERS

ONE of the difficulties which have confronted Canadian manufacturers in building up an export trade with South America is the limitation of banking service. The exporter has to wait too long for payment. In this article the National City Bank of the United States describes how it is attempting to solve this problem by establishing branch banks in South America.

Preliminary Investigations.

When it was decided to establish branches of the National City Bank in South America, a communication was sent to exporters and importers throughout the United States, calling attention to the contemplated action and requesting suggestions. A study of the needs of merchants in the United States seeking business in South America had already demonstrated the necessity of developing a service in connection with the branches which should give to our business interests the same kind of personal assistance and aid as that furnished by foreign banks to their commercial interests.

The general object of the letter referred to was to obtain, from those experienced in South American business, suggestions which might be beneficial in planning a comprehensive service and to disclose difficulties which had been met by others who desired to enter the field. It was thought that by obtaining first-hand information of the conditions affecting South American trade general plans could be made for a service which would be of real value to those who were interested.

The National City Bank acknowledges the help which it has received, and desires to express its appreciation to those exporters and importers who have willingly given their time and attention to its requests for information.

Preliminary Arrangements.

Action upon the application of the City Bank to establish its branches in Argentina and Brazil was necessarily delayed because the Federal Reserve Board, from whom authority to establish branches in foreign countries must be secured, has only been recently organized. The Board acted as promptly as possible and granted the requests.

Representatives of the bank arrived in Buenos Aires the last week in July, and have been engaged in making arrangements preliminary to the organization of the branch in that city. The plans for the establishment of the branch at Rio de Janeiro are being worked out, and branches at other points will be established as developments make it desirable.

It is possible at this time to outline, somewhat indefinitely, the plans for the service which the National City Bank proposes to establish in connection with these branches.

The Banking Service.

First, the Banking Service: The branches of this bank will perform the usual banking functions, including the receipt of deposits, making collections, and dealing in foreign exchange. The ability to make cable transfers will prove a great convenience. As trade increases between the Americas, the market for the United States dollar will develop in the South American countries. This will mean the direct exchange from South American currency into the dollar, and will avoid the necessity of exchanging South American money into pounds sterling, and pounds sterling into United States dollars.

Second, Credit information: This is an auxiliary banking service, which the National City Bank is furnishing. At the present time credit conditions are so disturbed that it is particularly essential that business concerns in the United States and in South America should have full credit information about each other. It is planned to keep at the bank in New York a duplicate set of the credit files of the South American branches. There will be added to the staff of each branch credit men, whose entire time will be devoted to the gathering of credit information.

The South American branch will, in time, be in a position to answer requests for special credit reports upon any particular business house. It may be well to add here that reports in the ordinary course of the mails cannot be made in less than two months, but whenever an immediate report is desired, the request and answer can be cabled. The Foreign Trade Department of the National City Bank will be glad to register the cable address of business concerns in this country, both in New York and with the South American branches, and it will gladly extend to business houses requesting it the facilities afforded by its special cable code. It is suggested also that representatives of exporters and manufacturers register their names at, and keep in touch with, the South American branches of the bank, so that, if desired, the home house can cable at any time through the bank, and reach its representatives.

Development of Market.

Third, Trade Information, Reports on Trade Opportunities, Work in Aid of the Development of Markets for United States Exports, are features of the enterprise. Connected with the staff of each of its branches, the National City Bank plans to have a special trade representative or commercial attaché. It will be the duty of the trade representative to study systematically the local markets, to investigate promising trade opportunities, and to assist in preparing the way for the business of the United States. It is expected that the commercial representative, working with the credit men, will be in a position in time to give advice and information to representatives and salesmen of firms in the United States which will facilitate their business.

The general trade field will be covered; the more important articles of import into the South American countries will be the subject of the first studies. It is planned that the commercial representative shall prepare reports covering the general export field, and these reports, as prepared, will be published from time to time.

The commercial representative will also be in a position to furnish information regarding trade laws and customs, foreign customs regulations, instructions in regard to packing, will be able to adjust minor difficulties, and be in a position to report concerning disputes arising over shipments.

In connection with the service for the encouragement of trade, libraries will be provided in the various branches for catalogues of exporters in the United States.

The commercial representatives will be, as their name implies, representatives of the commercial interests of the United States, and their sole business will be the furtherance, in every legitimate way, of trade between the Americas.

It must be understood that the plans for the service, as outlined, are tentative, and that suggestions in regard

to it will always be welcome. It must also be clearly understood that the development of this service will of necessity be gradual. The efficiency of the service will naturally depend upon the ability and the capacity of the men who are engaged in the work, and the selection and training of men for the work will take time. This point is emphasized, because of the fact that at the present time the eyes of business interests in this country are focused on the South American markets, and through optimistic newspaper articles, the enthusiasm of exporters has been aroused to the utmost over the possibility of quickly capturing the South American markets.

The National City Bank expects the banking business in connection with its branches to develop gradually. Its trade service will also be a matter of evolution. It cautions the exporter who is turning his eyes to South America to enter the field with the same expectation, that his business will develop slowly, and that it will develop successfully only if he studies the market carefully, pursues it persistently and with full consideration for the necessities and wishes of his prospective customers.

Temporary Accommodation.

Pending the actual establishment of its branch at Buenos Aires, and with the purpose of aiding in the trade between the Argentine Republic and the United States, the National City Bank has concluded an arrangement with the Banco de la Nacion Argentina for an exchange of credits. This arrangement makes it possible to facilitate greatly our reciprocal business with the Argentine Republic at the present time. The relations which have been established with the Banco de la Nacion, the largest bank in the Argentine Republic, shows the spirit of cordial co-operation which exists in that great institution, and the National City Bank appreciates it. Similar affiliations and credit arrangements will be established with other South American countries as quickly as negotiations that are now in progress for that purpose can be brought to a conclusion.

FRENCH INQUIRY FOR CONSTRUCTION MATERIALS.

Hon. Philippe Roy, the Canadian Commissioner General at Paris, has forwarded a copy of a communication from an engineer in that city engaged in public works and the building trade who desires to have the attention of Canadian manufacturers and dealers drawn to his probable requirements for the near future. In anticipation of the developments which will be brought about by the repair of lines of communication and the reconstruction of the public works and buildings destroyed by the war, it is expected that the following materials will be required in considerable quantities at an early date:—

Lumber, squared and logs, for frame work and joinery.

Sectional iron and steel for frame and railways.

Machine tools for timber.

Machine tools for iron.

Metallic bridges and frames, fixed and adjustable.

Lumber bridges and frames, fixed and adjustable.

Lifting apparatus, such as cranes, trucks, crabs, etc.

Tools for earth-work, quarries, pile-drivers, such as steam clams and shovels, perforating machines, mining crowbars, shovels, picks, etc.

Tools for the crushing of stone.

Tools for the manufacture and utilization of mortar and concrete.

Transportation material used on public works stock yards, such as wagons, portable railroads, locomotives and locomobiles, auto trucks and carts, wheelbarrows, etc.

The engineer inquiring for these materials requests interested Canadian concerns to forward their catalogues and other particulars, so that he may be in a position to place immediate orders when the occasion arises. The name and address of the engineer in question may be had on application to the Department of Trade and Commerce, Ottawa. (Refer file No. A 935.)



James Jolley & Sons, Hamilton, Ontario, Manufacturing Bridles, Saddles, Artillery Harness for the War

SHOULD FREIGHT RATES BE INCREASED?

MANUFACTURERS PRESENT CASE TO BOARD

PUBLIC interest has been aroused by the application of the railways of Canada to the Dominion Railway Board for permission to increase their freight rates. During the recent session of the Board, Mr. S. R. Parsons, Chairman Transportation Committee of the Canadian Manufacturers Association, presented the following case on behalf of the manufacturing interests. Mr. J. E. Walsh, Manager of the Transportation Department, C.M.A., supplemented Mr. Parsons' arguments by statistics and special cases in detail.

Mr. Parsons' Address.

"The application of the Canadian Freight Association, on behalf of the railway companies, to the Board of Railway Commissioners for permission to make a general increase in freight rates for Eastern Canada, is one of the most important matters that has ever been brought before the Board.

"At the outset, I wish to make it quite clear that we do not come forward at this time objecting to the entire proposition of the railways for an advance. We recognize the fact that the railways must live, and do business with a reasonable profit. The question of an advance in freight rates is, however, involved to such an extent with other matters that should, in our estimation, be considered at the same time, that we take advantage of this opportunity to sum up the situation as it presents itself from our standpoint.

The Cost of Improvements.

"It may fairly be said that we are demanding on the part of the railways better and safer road-beds, double tracking, more adequate terminals, and improved equipment throughout, in order to secure more satisfactory service for passenger, as well as freight traffic. The railways feel it incumbent upon them, as far as possible, to meet these demands, and they must do it, either by providing funds out of net profits, or by additions to capital stock. In some cases it is understood that our railways have spent many millions during the past few years out of their net returns, for betterments such as above indicated. This policy has probably prevented them from paying dividends upon their capital stock, and, therefore, on this very account, it is harder for them to raise additional capital in the money markets of the world. In such cases it might well be asked if this is a condition calling for higher freight rates? It is like a manufacturer putting all his profits into increased construction, equipment and betterments, thus preventing dividends being paid to shareholders, and then seeking to right the situation by advancing prices to customers.

A Huge Capitalization.

"The capitalization of all Canadian railways is now stated to be about two billions of dollars, which is quite a tidy sum for a young country to pay interest upon. A recent Ottawa report states, 'The rapid increase in new mileage during the past few years is evidently considerably in excess of the country's demands for freight and passenger traffic, and the decrease in net earnings, coupled with the immense increase in capitalization, is one reason for the present application to the Railway Commission for an increase in freight rates.' There is a widespread belief to day that we have more lines of railway than are required to serve our present needs in Canada. We all hope and believe, however, that in the course of a number of years we will have progressed to a point where all our transcontinental lines will be needed, and where the new territory in Ontario, as well as the far west, which these and other lines are opening up, will be freely settled with traffic-producing population, thus contributing in a large measure towards curing the present overloaded condition. Unfortunately, however, branch lines have been built, for which there does not appear to be any profitable traffic in sight. Such lines have paralleled other lines, without serving new territory, and by the very competition which has thus been engendered, all the lines have been forced to provide equipment of the highest order. If such lines prove to be unprofitable, who should be called upon to make up the loss? If these lines are a drag on other lines which were necessary in the interests of the country, should the public be made to suffer in consequence by the exaction of higher freight rates? On the contrary, should it not be the duty of the various Governments of the country that have chartered, subsidized, and guaranteed the interest on bonds, etc., especially of lines which could not be looked upon as paying properties, to consider, as trustees for the people, how such roads should be maintained? The Board of Railway Commissioners, not having been consulted in connection with the projection of these new lines, have, we believe, a somewhat difficult duty to perform in the settlement of this question of higher freight rates, which perhaps would be better considered conjointly with the Governments involved.

Are Earnings in Proportion to Expenditure.

"The railways make the statement that, since 1909, on account of Governmental regulations, taxes, the orders of the Board of Railway Commissioners, and the great increase of wages, the cost of doing business has been enormously increased. These are statements which are, no doubt, entirely correct, and should be given due consideration. On the other hand, consideration should also be given to the gross yearly earnings of the railways since 1909, with a view to seeing whether these have increased in proportion, and whether the railways are not actually earning a greater net amount on their capitalization than before. Many a manufacturer finds that since 1909 his payroll has increased enormously, and that, in the way of taxes, regulations, workmen's compensation contributions, etc., he is paying a huge additional amount in increased expenses. The larger volume of business obtained in these years, however, has made it possible for him to make as good a net return on his capital as before, notwithstanding these increases in expenses. This might also prove to be the case in connection with railway undertakings.

How Manufacturers Would be Affected.

"So far as the proposition to increase freight rates on coal, raw materials, and other manufacturing necessities is concerned, this would bear very hard at present upon manufacturers, many of whom have been loyally keeping their plants running as far as possible, even at an actual loss, in order to protect their workmen, and keep alive their organizations. In some cases manufacturers sell their products under contract to the end of the year. Many such contracts are now in existence, and to this extent the proposal to increase freight rates, where a delivered price has been agreed upon, would be only adding to the, at present, very heavy burden of the manufacturer. Of those not bound by contracts, many others would find themselves unable to advance

prices, by reason of established trade practices and other causes, notwithstanding the fact that their raw materials would, under the new proposition, cost them considerably more.

"To this line of argument the answer will be raised that, in the course of time, the manufacturer will succeed in passing his increased cost along to the wholesaler or to the retailer, who in turn will pass it along to the consumer, but such a solution is to be avoided, because of the fact that it would add to the high cost of living, a burden which it should be our common endeavor to alleviate rather than to accentuate.

"Largely increased freight rates might act as a deterrent to business, particularly between Ontario and the Lower Provinces. Higher railway freight rates would, no doubt, be followed immediately by higher rates of the carriers by water, now that their interests have been largely merged into one concern. In passing it should be mentioned that the immense sums being expended for the deepening of the Welland Canal, and improvement of other waterways and harbors, may become altogether ineffective in cheapening transportation costs, as intended, owing to certain combinations and regulations.

Present Conditions Abnormal.

"It is possible, too, that the present world-wide depressed conditions affecting all interests are so acutely felt by the railways that temporary conditions are unwittingly magnified to appear as those prevailing in normal times. There should be a distinct differentiation between prevailing conditions, and those which might be considered more regular and stable. The years 1909 to 1913, inclusive, should, we think, form a fair basis for building up any records upon. We believe that railways just at present are suffering more from a lack of business than from unremunerative rates. In this, of course, they are simply on a par with the large majority of other commercial interests of the country. Many manufacturers are confronted with diminishing business, higher costs, and even lower selling prices.

"There is no disposition whatever on the part of the Canadian Manufacturers Association to be unfair or unjust to the railways of the country, or to get from under any burdens which should properly be placed upon their shoulders. We cheerfully recognize the fact that the railways spend money freely, and at the present time the expenditure of large amounts would be of particular help to the country at large. If the railways would make purchases in Canada, of Canadian-made products, they would thus directly help the manufacturers. While recognizing all this, however, in view of the foregoing remarks, we believe that this is altogether too big a question, and involves interests that are too far-reaching to be answered offhand. It is desirable that, as far as possible, there be stability in freight rates, as in the customs tariff, and we think the time has come when a thorough study and survey of this intricate question should be made, in the interests of the railways on the one hand, and the public on the other. If the results of such a study and survey point convincingly to the fact that the real remedy for the troubles of the railways is higher freight rates, notwithstanding that the carriers have other sources of revenue, and that this is the proper solution of the question as affecting all parties concerned, the manufacturers will not object to bearing their share of the burden, properly adjusted. This, however, should be made clear to the Board."

INSVRANCE

The Educative Photo-Play.

THE various fire prevention bodies in the United States are showing practical recognition of the value of the kinematograph as an educational agency. A photo play entitled "The Locked Door" was recently worked up by the New York Fire Department and illustrated the danger of locked doors in factories. A number of manufacturers of weekly review films have expressed their willingness to co-operate as far as practicable, and it is probable that this branch of fire prevention work will be considerably developed.

Shingles as a Fire Hazard.

The general use of shingles for roofing adds considerably to the ordinary fire risk, as well as to the conflagration hazard. To overcome this disadvantage, numerous experiments have been made with the object of discovering a material, the application of which will render shingles fireproof, or at least fire retardant. It has been demonstrated that the application of paint will protect shingles from the weather, thus preventing warping and the formation of pockets in which hot cinders may lodge; irregularities in the surface are also filled up by the paint. Experiments have demonstrated that, under a one-minute exposure to flame, painted shingles are barely affected, while unpainted shingles are badly attacked. Under a three-minute test, the unpainted shingles were severely burned, while the effect upon the painted ones was such that the actual burning was limited to the portion directly exposed to the flame, the paint retarding the spread of the fire and the charring of the wood. In the absence of any positive fireproofing material, the results obtained from the use of paint upon exposed shingles may be considered one of the best means of reducing this particular hazard.

Fire Prevention in Dakota.

In the report of a meeting printed in the Sioux Falls *Daily Press*, of December 1, 1914, appears this innocent-looking paragraph:—

"An ordinance was passed yesterday withdrawing a block between Third and Fourth Streets, in Main Avenue, from the fire limits."

An investigation by an N. F. P. A. member of the reasons for this juggling of the fire limits by the protectors of the city reveals both the African and the (prospective) woodpile. Last summer a brick veneered building, occupied by the Dakota-Moline Plow Co. as a warehouse for agricultural implements, on the northeast corner of North Main Avenue and West Fourth Street, was struck by lightning and burned. In order that this property might be rebuilt as a brick-veneered structure and not violate the city fire limit ordinance, the block in which it is located was obligingly taken out of the company of its betters by the city guardians, and the three-story brick-veneered building is now in process of construction.

Sioux Falls has not a favorable fire record for a city of its size. Its fire department has been unsuccessful in extinguish-

ing serious fires in a number of brick-veneered buildings, of which the warehouse on the site of the one now building was a demonstration. Such a performance by the city officials as this in Sioux Falls would be incredible were it not so common.—*Quarterly of the National Fire Protection Association.*

Mutual Underwriters Meet.

At the annual meeting of the Mutual Fire Underwriters' Association of Ontario, the president remarked that the fire record of Canada is the worst in the world. In Canadian cities the proportionate fire loss was seven times greater than in cities of Great Britain. During the discussion which followed, this tremendous fire loss was attributed largely to the presence of so many wooden buildings and badly constructed chimneys. The Association decided to appeal to the legislature to amend the Act so that where loss was caused by smoking in barns or stables by the assured or any other person with his knowledge or consent, the amount of the damage could not be claimed under the insurance policy. Among other resolutions passed was one that it shall not be incumbent upon any company to submit to arbitration any question as to the value of property insured, property saved or the amount of the loss and the proportion to be paid by the company, but all questions may at the option of the company be decided in an action brought to determine the company's liabilities. This would mean the repeal of Article 21 of the Ontario Statutory Conditions, and it is not very probable that the Association's resolution will become law.

Conclusions from the Edison Fire.

The National Fire Prevention Association have issued a full and interesting report in connection with the Edison fire at Orange, N.J. The fire originated in a metal-clad film-inspecting building, and was apparently caused by spontaneous combustion in a receptacle containing lengths of nitro-cellulose film. The following conclusions, among others, are drawn from the investigation:

That the square type of reinforced concrete column is not suited to resist severe fire. The damage to square columns was general throughout all portions of the buildings seriously exposed to the fire. The behaviour of the round columns covered with metal lath and plaster was very much superior.

That the entire lack of fire walls and other fire resistive construction, coupled with inadequate fire extinguishing equipment, permitted large buildings to burn freely throughout, thus submitting ever portion of the concrete to long-continued, severe heat, which produced excessive expansion stresses.

That column collapses were directly attributable to the above-mentioned expansion stresses, aided by intense local heating, and that severe structural damage is liable to occur whenever buildings of this type of construction, with large unbroken areas, filled with combustible material, are allowed to burn unhampered.

That the square columns and variations from present-day practice in design or construction must be held accountable for a large part of the structural injury produced. Among variations from present-day practice it was found that there was an entire omission of ties on column bars, resulting in the displacement of bars in some columns; that there was a lack of anchorage of beam and girder reinforcement bars into floor slabs; that there was a lack of spacers in beams and girders to hold the bars properly apart so as to secure full bond strength of concrete and proper support for the fireproofing at the bottom; and that in numerous instances beams and floor slabs were cast at different times, thereby greatly reducing the strength of the combination.

The Association emphasizes that confidence in the reliability of reinforced concrete as a fire resistive construction should not be destroyed because of this disaster. The details of the report strikingly illustrate the fact that adjoining and communicating buildings without proper fire stops were general throughout. One group of buildings consisted partly of reinforced concrete and partly of light brick and frame structures aggregating a floor area of 103,750 square feet, and was entirely without fire stops. The absence of window protection was general. In one of the largest reinforced concrete buildings 52 per cent. of the entire wall area consisted of thin glass in wooden sash.

TARIFF

By J. R. K. BRISTOL

THE tariff changes brought before Parliament by the Minister of Finance on February 11, 1915, have been amended to some extent. These amendments are in the nature of further exemptions from the Emergency Customs War Tariff and are retroactive in effect to February 12, 1915. They are as follows:—

Further Exemptions from Emergency Customs Tariff Tax.

(l) Silk in the gum or spun silk imported to be used in the manufacture of woven labels;
(m) Manuscripts;
(n) Bananas;
(o) Acid phosphate of lime, sulphite of ammonia, nitrate of soda, muriate and sulphate of potash, imported to be used for fertilizing purposes;
Item 25a Coffee, extract of, n.o.p., and substitutes therefor.
Item 26 Coffee, roasted and ground, n.o.p., etc.
Item 27 Coffee, roasted and ground, not imported direct, etc.
Item 28 Coffee, green, imported direct, etc.
Item 29 Coffee, green, n.o.p.
Item 45 Milk foods, n.o.p., prepared cereal foods, etc.
Item 90a Wild edible berries, n.o.p.
Item 363 Platinum wire, and platinum in bars, strips, sheets or plates.
Item 662 Fertilizers, unmanufactured, animal or vegetable manures, etc.
Item 663 Fertilizers, compounded or manufactured, n.o.p.

Excise duties shall be disregarded in estimating the market value of goods for the purposes of the Customs Tariff amendments made this session of Parliament.

Collectors of Customs are authorized to certify refund claims for excess duties paid under these tariff amendments since 11th February, 1915.

War Revenue Stamp Tax.

The Stamp Tax will come into full force on the 15th of April, 1915. In respect to mail matter we are advised that it will not apply to circulars in unsealed envelopes nor to booklets, catalogues, magazines, newspapers, parcels, and the like. it will apply to letters and postcards.

Stamp Tax on bills of lading dropped; the changes made to the War Revenue Bill in committee resulted in the proposed Stamp Tax on bills of lading being dropped, and there will not be any Stamp Tax on bills of lading of any kind.

The Stamp Tax on still wines is changed from 5c. on each bottle or package containing 1 qt. or less to 3c. on each bottle or package containing 1 pt. or less, whilst the tax stands at 5c. for 1 qt. or less but more than 1 pt.

On champagne the Stamp Tax is changed from 25c. on each bottle or package containing 1 pt. or less to 13c. on each bottle or package containing ½ pt. or less, and the rate of 25c. is maintained on each bottle or package containing 1 pt. or less but more than ½ pt.

On proprietary or patent medicines the Stamp Tax is changed from 1c. on each bottle or package whereof the retail price is 10c. or less to 1c. on each bottle or package whereof the retail price is 25c. or less.

Special or Dumping Duty.

The Emergency Revenue Measure of the 12th ult. levies a customs duty of 5 per cent. British Preferential and 7½ per cent. General Tariff on most products which formerly were free of duty.

Whilst such products were free of customs duties special or dumping duty applied without any marginal exemption allowance so long as they were of a class or kind produced in Canada.

But now that such products are subject to customs duties, special or dumping duty only applies under the regulations in cases where the selling price is more than 5 per cent. lower than the value for duty.

Ribbon Gold Leaf declared to be exempt from special or dumping duty as being of a class or kind of goods not made in Canada.

Trading with the Enemy.

Goods manufactured in territory belonging to friendly countries but occupied by the enemy have heretofore been permitted to be imported.

By proclamation of the King, issued from Ottawa on the 8th inst., it is provided that the prohibition against trading with the enemy shall apply to and include the territory of friendly countries which for the time being is in the effective military occupation of an enemy (territory in hostile occupation).

In this connection the said proclamation also provides "that nothing therein shall be taken to prohibit anything "which may be expressly permitted by Our license or by a "license given on Our behalf by a Secretary of State, or the "Board of Trade, or the Lords Commissioners of Our "Treasury, whether such licenses be specially granted to in- "dividuals or be announced as applying to classes or per- "sons, or to prohibit any special arrangements which may be "made by any such license or otherwise with Our authority "for special treatment of any occupied territory, or persons "in any such occupied territory entitled to such special "treatment."

Prohibited Exports.

Prussiate of Soda.—The export of Prussiate of Soda from Canada is prohibited to all foreign destinations except under special license from the Department of Customs.

Customs Rulings.

The following articles are ruled to be entitled to free entry under Tariff Item 470 when for use in the construction of ships or vessels. The wording of the ruling is as follows:

Corrugated boiler furnaces, boiler tubes, "metallic packing" (so known and designated), Howden's Down Draft System (forced), including patent doors and other part thereof, ships' anchors; cable chain, made from iron or steel bars, not less than ¾ of an inch in diameter; Downtown deck pump (patent), capstans, windlasses, steering gear; ships' deck winches, of throttle handle design, having cylinders 5 in. x 5 in. and upwards, not controlled by clutch or brake band (until further instructed regarding such winches).

NOTE.—Tubing of steel (not being boiler tubes), ten inches in diameter and less is made in Canada and should not be admitted free under Item 470. Tubing of iron ten inches in diameter or less is also dutiable as "iron" and "steel" are regarded as synonymous terms for customs tariff purposes.

Elliott Addressing Machine. declared to be dutiable under Tariff Item 442, in effect from 1st July, 1914.

Sulphonated Oil (so-called) per sample from Martin Dennis Co., Newark, N.J., ruled to be dutiable under Tariff Item 711.

Litho Offset Rotary Printing Press No. 1, manufactured by Linotype & Machinery, Limited, Broadheath, England, declared dutiable under Item 442.

Embargo on Wool.

Wool from the United Kingdom and Australia may only be imported into Canada conditional upon a formal undertaking by the importer that such wool, or its products in the following forms, will not be exported from Canada except to the United Kingdom, viz.:—

Wool, raw (sheep and lambs); wool tops, wool noils, woollen and worsted yarns; woollen and worsted cloth, suitable for uniform clothing (not including women's dress stuffs or cloth with pattern); uniform clothing; cardigan jackets, woollen jerseys, woollen gloves, woollen socks, and men's woollen underwear of all kinds.

NOTE.—The embargo extends to wool pulled from Australian sheepskins which are imported direct from Australia; and also to wool pulled in Canada from sheepskins imported from the United Kingdom.

Foreign Trade.

The exports of Canadian products for the month of February, 1915, are over eight million dollars in excess of the exports for the same month a year ago. The exports of mine products are about eight hundred thousand dollars less than for the same month last year; but the following industries show gains, viz.: Fisheries, about five hundred thousand dollars; forest products, about four hundred thousand dollars; animals and their produce, about one million four hundred thousand dollars gain; agricultural produce shows a gain of almost two and a half million dollars, whilst manufactures show a gain of over four and a quarter million dollars. The total domestic exports for the corresponding months were: February, 1914, $20,553,087; February, 1915, $28,881,277.

In the value of imports there was a decided falling off in February, 1915, as compared with February, 1914. Of dutiable goods the importations in February, 1914, were $25,511,846, and in February, 1915, $21,956,997. In free goods the importations were: February, 1914, $13,028,199, and February, 1915, $13,955,913.

LEGISLATION IN QUEBEC

By H. T. MELDRUM

Factory Machinery in Incorporated Municipalities Exempt from Taxation—New Regulations Regarding Tariffs of Provincial Railways.

THE session of the Quebec Legislature of this year closed on February 26th, having considered some 200 bills and passed on 179. While many of these measures were of importance there was no original legislation of a striking character.

Towards the close of the session the Legislature was thrown into mourning by the death of His Honour Lieutenant-Governor Sir Francois Langelier. Sir Francois' long life had been passed largely in the public service as a Member of the Legislature, Member of the Federal Parliament, Judge of the Superior Court, Chief Justice, and finally Lieutenant-Governor of the Province. He was succeeded by the Honourable P. E. Leblanc, former Leader of the Conservative Party in the Legislature, of which he had been a member for twenty-six years, during which time he had displayed marked administrative ability.

New Municipal Code.

Of primary importance to the manufacturers was the adoption, by a joint committee representing the Legislative Council and the Legislative Assembly, of the principle of non-taxation of machinery for municipal purposes. Some four years ago a Commission was appointed to revise the Municipal Code which governs the legislation of all municipalities except incorporated towns and cities. This Commission completed its work two years ago, submitting a draft of a new code to the Legislature, which draft was referred to a special joint committee for further consideration and the hearing of representations. The article dealing with assessments provided as in the old code for the taxation of land, buildings and machinery. Representatives of the Association appeared before the Committee at the session of 1914 and again in 1915, and finally unanimous approval was given to a revised article which provides for the taxation of land and buildings only.

The work of the Municipal Code Committee was completed too late in the session to allow the submission of their work for the approval of the two Houses. A bill was accordingly passed providing for the appointment of special law officers to check up the work of the Committee, after which the new code shall become effective on proclamation of the Lieutenant-Governor.

Railway Tolls.

A revision of the Provincial Railway Act was also of importance. Various complaints had been made to the Association that railways under Provincial control had advanced rates without giving notice, and while complaint thereof might be made to the Public Utilities Commission, the procedure threw the burden of proof on the shipper and not on the carrier. Representations having been made to the Government, the Minister of Public Works introduced a bill providing that railways should be required to post notices of advances in rates in every station at least thirty days before they were supposed to become effective, while the Public Utilities Commission was given authority to suspend any tariff pending investigation as to its reasonableness. It was further provided that Provincial railways might be required to issue joint tariffs on order of the Utilities Commission.

By another bill the Public Utilities Commission was given authority whenever it appeared from any enquiry that services required by it were made necessary through the fault or negligence of any person, public utility or municipality, to condemn the party so in fault to the costs incurred in the enquiry.

An amendment to the license law fixed the fee on each wholesale license to sell wine only at 50 per cent. of the amount of license duty required for any ordinary wholesale license. This was done for the benefit of the Canadian wine manufacturers.

Provision was made requiring the owners of automatic distributors to procure a license costing $4 for each such distributor.

An Act to amend the Succession Duties Act provided that property transferred within three years prior to the death of the original owner should be held liable for succession duties as though the transfer had not taken place.

The Quebec Cullers Act was amended to provide that holders of diplomas as Forestry engineers issued by the Quebec Forestry School should be relieved from taking examinations provided that the holder of such diploma should have had at least three months' experience in measuring wood in a sawmill.

By a Government bill it was forbidden for any employer to make any retention of any part of the salary or of wages of his workmen or employees for purposes of insurance against accidents or sickness happening by reason of or in the course of their work, even with the consent of such workmen or em ployees.

CIVIC CHARTER BILLS.

A number of commercial bodies, took an active interest in opposing certain clauses in the Montreal City Bill, which would have had the effect of causing still greater confusion in the already badly mixed state of the administration of that city. These proposed changes, drafted under the auspices of the City Council elected last year, formed the major portion of the Bill to amend the Charter of Montreal. The battle before the Legislature was sharp but decisive, the commercial interests winning all along the line. Every clause opposed was rejected by the Committee of the Legislature.

In addition to this there was in the Montreal bill a clause requiring every non-resident workman to procure a license at a cost of $25 before starting work. This was accepted by the Lower House, but rejected by the Legislative Council.

Various other bills to amend the charters of citizens and towns also contained clauses inimical to the interests of the manufacturers, as for instance the Sherbrooke bill, which provided that each manufacturer should file each year a detailed statement of all his assets, the value of his real estate, buildings and machinery. This section of the Sherbrooke bill was opposed and defeated.

RUSSIA IN THE FAR EAST

By J. W. ROSS,
Trade Commissioner in China in Weekly Report, Department Trade and Commerce

What Can Canadian Manufacturers Provide for the Great Market Which is Developing in Russia?

THE following report is intended to show what Russia is doing in this part of the world, the extent of its commercial relations with China, and the further possibilities of Russian trade with Canada.

Russia is very like Canada in many respects, and this is true inasmuch as a large part of its territory is situated in the same parallels of latitude and, therefore, the climate over a considerable portion of the empire is practically the same as that which prevails in Canada. Here, however, the similarity would seem to end.

Russian Trade.

From a recently published report the statistics of the trade of Russia during the past six years are as follows, in pounds sterling:—

	Exports.	Imports.	Total Trade.
1908	£ 99,078,500	£ 80,256,900	£179,235,400
1909	144,208,200	83,213,500	227,421,700
1910-	138,032,500	100,586,600	238,619,100
1911	160,183,800	108,222,100	268,405,900
1912	151,008,800	109,471,100	260,479,900
1913	150,355,000	129,150,700	279,505,700

Canada during the same period imported goods from foreign countries as follows:—

1908-9	£309,756,608	or £ 61,951,322
1909-10	391,852,692	78,370,539
1910-11	472,247,540	94,449,508
1911-12	559,320,544	111,864,109
1912-13	692,032,392	138,406,478

Trade Comparisons.

From these figures it will be seen that Canada, with a population of only one-twentieth of that of Russia, annually imported, during this period foreign goods in greater quantity than the latter country. Moreover, Canada's import trade increased in the five years over 120 per cent., while Russia only increased her import trade in the same period by 60 per cent.

In general trade per head of population, Russia is among the lowest of all nations, and of all great countries is next in order to India and China, the latter being the lowest of all, viz., 6s. per capita, India 18s., and Russia £1 13s., while the general trade of Canada per head is £25, or twenty times in excess of Russia's per capita trade.

From these figures it can readily be seen what possibilities are presented for commercial development on a large scale throughout such a country as Russia, whose land area exceeds that of all others.

Russia is not unlike China in some respects, such as the presence of a large unwieldy population of frugal and industrious peasantry, and unlike Canada in that the population are already there in advance of the development of the country, while in Canada development proceeds *pari passu* with the advent of the settler, the latter therefore being never long separated from the comforts or even the luxuries of modern life. This is not the case with the Russian peasant. The absence of railway facilities and the lack of roads over great tracts of country have been responsible for the very retarded state of national development.

The bulk of Russia's export trade is entirely made up of raw materials, foodstuffs, hides, skins and furs, animals, tallow, and similar products.

Manufacturing Establishments.

While Russia cannot show any considerable amount of manufactured goods exported abroad, yet the manufacturing establishments of the empire are far from being unimportant. The small annual importation of foreign goods per capita should prove that the demand for home manufactured articles to supply the needs of 150,000,000 people cannot be by any means a small item.

The number of manufacturing establishments (exclusive of mines) under factory inspection in Russia, in 1912, was 17,356 with 2,151,191 operatives, as against 16,600 with 2,051,191 operatives in 1911. A comparison of the wages paid to operatives shows that the aggregate earnings in establishments where fines are in force amounted to $196,730,000 in 1912, this being an increase of $6,180,000, as compared with $190,500,000 earned in 1911, while the average earnings per operative rose from $129 in 1811 to $131 in 1912. If the average earnings per operative in establishments where fines are not enforced are the same as in establishments where the operatives are fined, the total earnings of all operatives for 1912 would amount to $282,735,000, or an increase of $17,510,000 over 1911. The factory statistics for 1908, as reported by the Ministry of Commerce and Industries, show that the aggregate annual production of all establishments (including mines and metal works) amounted to $2,218,105,000. The output for 1912 of the factories and works employing 2,151,000 operatives was estimated by the same ministry at $2,644,010,000. The net production, after deducting the cost of materials and fuels, was calculated at $764,260,000 for 1908 and $910,520,000 for 1912.

Commercial Expansion.

In his report on the foreign trade of Russia in 1913, Mr. A. W. Woodhouse, British Consul at St. Petersburg, gives many interesting facts to prove how rapid has been the industrial development of the country during the past few years. Many of the manufacturing trades have for the time being overtaken the supplies of raw material, and as a consequence the prices of all kinds of fuel have advanced, and the banks and similar institutions are finding it increasingly difficult to finance the remarkable commercial expansion.

A short time ago Russia was dependent almost entirely for her manufactures upon importations from abroad, but in recent years factories and workshops have sprung up in nearly every part of the country. Much of the industrial work of the country is, however, done in the homes of the working classes. The chief industries are distilling and brewing, cotton manufacturing, and sugar refining. A number of flour mills, brick works, and woollen factories are also to be found.

HONOR ROLL

THE following members and managers of Canadian manufacturing concerns now on active military service:

NOTE.—Owing to limitations of space, only members and managers of manufacturing concerns can be included in this list. INDUSTRIAL CANADA will be glad to receive additional names.

Col. Chas. Smart, Smart-Woods, Limited, Montreal.

Col. John Gunn, Gunns, Limited, Montreal.

Lieut.-Col. J. Bruce Payne, J. Bruce Payne, Ltd., Granby, P.Q.

Lieut-Col. R. W. Patterson, Winnipeg Paint & Glass Co., Ltd., Winnipeg.

Lt.-Col. Frank Howard, Brantford Emery Wheel Co., Brantford, Ont.

Lieut-Col. A. B. Petrie, Petrie Mfg. Co., Winnipeg.

Lieut.-Col. G. F. C. Poussette, Assistant Secretary C. M. A., Winnipeg.

Lieut.-Col. J. J. Carrick, Pigeon River Lumber Co., Port Arthur.

Lieut.-Col. J. A. Currie, M.P., Imperial Steel and Wire Co., Ltd., Collingwood.

Lt.-Col. F. C. McCordick, Frank C. McCordick, St. Catharines.

Lt.-Col. E. W. Rathbun, The Rathbun Co., Deseronto, Ont.

Lieut.-Col. A. J. Oliver, R. McDougall Co., Limited, Galt, Ont.

Lieut.-Col. J. F. L. Embury, Canadian Lock Joint Pipe Co., Regina, Sask.

Major F. J. Dingwall, D. R. Dingwall, Ltd., Winnipeg.

Major W. R. Marshall, Standard Fuel Co., Ltd., Toronto.

Major John McPhee, Barrie Tanning Co., Barrie.

Major Wm. Scully, Wm. Scully, Montreal.

Major Kimmins, E. D. Smith & Son, Ltd., Winona, Ont.

Major Pelly, Steel and Radiation, Ltd., Toronto.

Major Russell Britton, Manager, Cowan & Britton, Ltd., Gananoque, Ont.

Major W. R. Turnbull, Robert Duncan & Company, Hamilton, Ont.

Major J. K. Bertram, The John Bertram & Sons Co., Ltd., Dundas.

Major J. L. R. Parsons, Canadian Lock Joint Pipe Co., Regina, Sask.

Major T. C. Irving, Moffatt-Irving Co., Toronto.

Captain Trumbell Warren, Gutta Percha & Rubber Co., Ltd., Toronto.

Captain Harvey B. Evel, Evel Casket Co., Ltd., Hamilton.

Captain W. D. Greer, Consumers Gas Co., Toronto.

Captain J. T. Duguid, Imperial Steel and Wire Co., Ltd., Collingwood.

Captain F. F. M. Brown, College Press, Ltd., Toronto.

Captain Smith, E. D. Smith & Son, Ltd., Winona, Ont.

Captain F. R. Newman, Canadian Fairbanks-Morse Co., Ltd., Toronto.

Captain F. P. Duck, D. Acland & Son, Winnipeg.

Captain G. H. Weld, Farmers Advocate, Ltd., Winnipeg.

Captain W. L. Roblin, Winnipeg *Telegram*, Winnipeg.

Captain R. Steacie, Smart-Woods, Ltd., Montreal.

Captain George D. McLauchlan, McLauchlan & Sons Co., Ltd., Owen Sound, Ont.

Capt H. C. Trenaman, Domestic Specialty Co., Limited, Hamilton, Ont.

Capt. G. F. Grafton, Grafton & Company, Dundas, Ont.

Lieut Harvey Cockshutt, Cockshutt Plow Co., Brantford.

Lieut Norman V. Cliff, Toronto Salt Works, Toronto.

Lieutenant C. H. Ackerman, B. F. Ackerman, Son & Co., Peterboro.

Lieut K. E. Drinkwater, A. B. See Electric Elevator Co. of Canada, Ltd., Montreal.

Lieut T. E. Ryder, Canadian Fairbanks-Morse Co., Ltd., St. John, N.B.

Lieut. W. L. McIntosh, Canon Lake Lumber Co., Winnipeg.

Lieut W. S. Drewry, E. L. Drewry, Ltd., Winnipeg.

Lieut G. H. Saltmarsh, Metallic Roofing Co., Winnipeg.

Lieut Wm. Martin, Jr., Manitoba Gypsum Co., Winnipeg.

Lieut. B. M. Green, Smart-Woods, Ltd., Montreal.

Lieut. Jack Woods, Smart-Woods, Ltd., Montreal.

Lieut. Lacey, Steel and Radiation, Ltd., Toronto.

Lieut. Garrett, Steel and Radiation, Ltd., Toronto.

Lieut. Ian Hendrie, Hamilton Bridge Works, Ltd., Hamilton, Ont.

Lieut. Geo. C. Wright, E. T. Wright Co., Limited, Hamilton, Ont.

Lieut. W. H. McLaren, McLaren's Limited, Hamilton, Ont.

Lieut. H. C. Hatch, Canada Steel Goods Co., Limited, Hamilton, Ont.

Lieut. John Galt, Jr., Blue Ribbon, Limited, Winnipeg, Manitoba.

Lieut. R. G. Hutchinson, International Harvester Co. of Canada, Ltd., Calgary, Alta.

Sergeant Harold Rolph, Rolph and Clark, Ltd., Toronto.

Corporal A. R. Ackerman, B. F. Ackerman, Son & Co., Peterboro.

Corporal Stewart L. Young, Young-Thomas Soap Company, Regina, Sask.

Pte. Murton Rugg, E. W. Rugg Co., Winnipeg.

Arthur H. Coles, Edmonton Law Stationers, Ltd., Edmonton.

Pte. A. C. Bertram, The John Bertram & Sons Co., Ltd., Dundas.



Lieut.-Col. G. F. C. Poussette
Of Winnipeg, Western Secretary of the Canadian Manufacturers Association, who is going to the war as officer commanding the Ammunition Park, Second Contingent.

OCEAN SAILINGS FOR APRIL.

The following are the dates on which ocean steamers sail from Canadian ports during April for the specified destinations:

Australia.

To Sydney—Canadian Australasian Royal Mail Line: From Vancouver, *Niagara*, April 14; from Victoria, *Niagara*, April 14.

To Melbourne, Sydney—The New Zealand Shipping Company: From West St. John, *Whakatane*, April, 1915.

British West Indies.

To Bermuda, St. Kitts, Antigua, Montserrat, Dominica, St. Lucia, St. Vincent, Barbados, Grenada, Trinidad and Demerara—Royal Mail Steam Packet Company: From Halifax, *Chignecto*, April 9.

To Bermuda, St. Kitts, Antigua, Barbados, Grenada, Trinidad and Demerara—Royal Mail Steam Packet Company: From St. John, *Chaudiere*, April 11; from Halifax, *Chaudiere*, April 23.

To Santiago, Cuba and Jamaica—Pickford and Black Line: From Halifax, *Amanda*, April 15.

China.

To Hong Kong—Blue Funnel Line: From Victoria, *Titan*, April 7.

Fiji.

To Suva—Canadian Australasian Royal Mail Line: From Vancouver, *Niagara*, April 14; from Victoria, *Niagara*, April 14.

Great Britain.

To Glasgow—Blue Funnel Line:From San Francisco, April 7 (via the Panama Canal).

To Liverpool—Blue Funnel Line: From San Francisco, April 7 (via the Panama Canal).

To London—Blue Funnel Line: From San Francisco, April 7 (via the Panama Canal).

To Manchester—Manchester Liners, Ltd.: From St. John, N.B., *Manchester Citizen*, April 5; *Manchester Inventor*, April 19.

Hawaii.

To Honolulu—Canadian Australasian Royal Mail Line: From Vancouver, *Niagara*, April 14; from Victoria, *Niagara*, April 14.

Japan.

To Yokohama, Kobe—Blue Funnel Line: From Victoria, *Titan*, April 7.

New Zealand.

To Auckland—Canadian Australasian Royal Mail Line: From Vancouver, *Niagara*, April 14; from Victoria, *Niagara*. April 14.

To Auckland, Wellington, Lyttelton, Dunedin—The New Zealand Shipping Co.: From West St. John, *Whakatane*, April, 1915.

Philippine Islands.

To Manila—Blue Funnel Line: From Victoria, *Titan*. April 7.

KEEP MONEY AT HOME.

When you buy goods "Made in Canada" the money you spend circulates 100 per cent to the dollar in Canada.

When you buy Foreign Goods not more than 10 per cent. ever finds its way back into Canada.

Read that again! Then demand Canadian-Made Goods for every cent you spend—*Canadian Tungsten Lamp Co.*

OPPORTUNITY TO SELL CANADIAN POLES.

(From Trade Report No. 582.)

A copy of a communication from the Stores Department of the British General Post Office has been received by the Department of Trade and Commerce, from Mr. W. L. Griffith, Secretary to the Canadian High Commissioner, 17 Victoria Street, London, S.W. This communication has reference to the subject of the supply of telegraph poles for the British Post Office Service, and it states that no offer has been received from Canada of poles of the timber (*Pinus Sylvestris*) specified in the department's form of tender. The offers received were for red cedar, white cedar and long leaf pine, but these offers are at present unacceptable, as the Post Office Stores Department has had no experience of the suitability or otherwise of such timbers for telegraph poles. They are prepared, however, to consider the suitability of these timbers provided the suppliers would be willing to tender in accordance with the post office conditions of contract, as specified in the form of tender, and to forward sample poles for inspection. Copies of the post office conditions of contract are being forwarded to the Department of Trade and Commerce, Ottawa, where they will be obtainable on application by interested Canadians. In the event of the timber, after the examination and test of the sample poles, being found suitable, invitations to quote would be forwarded when supplies are again required. Contracts for the poles to be supplied this year have already been placed, but it is anticipated that the Stores Department will be in the market for further supplies by about August next. For further particulars interested Canadian suppliers of telegraph poles should communicate with the Department of Trade and Commerce, Ottawas. (Refer file No. A 989.)

WAR ORDERS FOR CANADA.

A special cable from London to the *Mail and Empire*, Toronto, dated March 24th, contained the following statement:

"An official memorandum regarding war orders states that at least ninety-five million dollars' worth of war material and equipment has been ordered by the allies from Canada, and that this expenditure does not include that incurred on behalf of the Canadian contingents, which exceeds twenty-five millions. Seventy-two Canadian companies have been given orders for machining shrapnel shells, and 67 are engaged in making the various parts required."

"SIGNS OF THE TIMES."

A very interesting booklet has been published by the Southam Press, Limited, Montreal, entitled "Are you Reading the Signs of the Times?" It is distinctly optimistic in regard to the commercial future of Canada. The writer also points out the necessity of consumers maintaining their product at as nearly as possible their former value. He says:

"Let your optimism extend also to your buying. The buying habit is a reflex of the mental attitude and is not wholly governed by the amount of money in our pockets. The millionaire, with a grouch on, will pass your store with a frown, but the cheerful clerk will step in and leave a few dollars in your cash drawer. So start right at home, and while you campaign for more and larger orders, maintain your own buying. Business has a right to expect you to do this in the same way that you expect it from other men. If you cease buying you cannot expect business to be normal."

The booklet contains some interesting statistics and will repay the time spent in perusing it.

PRODUCTION IN CANADA OF BEETROOT SUGAR, 1914.

It is estimated by the Census and Statistics Office that in 1914 12,100 acres of sugar beetroots were grown for manufacturing purposes in Ontario and Alberta, as compared with 17,000 acres in 1913. In Alberta, of the total area planted in 1914, only 100 acres were harvested, the drought in this province having caused an almost total failure of the crop. The total yield of roots is estimated at 108,600 tons, the average yield per acre being about nine tons. At an average price of $6 per ton the total value of the crop was about $651,000. At the conclusion of the sugar campaign of 1914 the production of refined beetroot sugar by the three Canadian factories was reported as 27,545,248 lbs., as compared with 23,964,272 lbs. of refined beetroot sugar produced in 1913.

STOCK OF WHEAT IN CANADA.

79,000,000 bushels of wheat were stored in Canada on February 8th, according to the Census and Statistics Office report recently compiled by the instruction of Sir George Foster. This was distributed as follows: Elevators, 31,000,000; mills, 6,000,000; in transit, 12,000,000; farmers, 30,000,000 bushels.

It is estimated that 44,000,000 bushels will be required for domestic purposes, leaving about 35,000,000 available for export.

TALE OF A DOLLAR BILL.

A farmer went to town to spend
Some of his hard-earned dough,
And in a merry jest, and just
To show his printing skill,
He printed his initials on
A brand new dollar bill.
He spent that dollar that same day,
Down in the village store,
He thought 'twas gone forever then,
And he'd see it no more.
But long before the year rolled by
One day he went to fill
A neighbor's order, and received
That same one-dollar bill.
Once more he spent that dollar bill
In his own neighborhood,
Where it would do himself and friend
The most amount of good.
Four times in two years it came back,
As some bad pennies will,
And each time he'd go out and spend
This marked one-dollar bill.
Had he been wise that dollar might
Be in his town to-day,
But just two years ago
He sent it far away.
The people who received it then
I know have got it still,
For 'twas to a foreign country
He sent his dollar bill.
No more will that marked dollar
Come into the farmer's hands,
And nevermore will help to pay
The taxes on his lands.
He put it where it never can
Its work of life fulfill;
He brought about the living death
Of that one-dollar bill.

NEW MANUFACTURING COMPANIES.

The following companies have been incorporated recently for manufacturing purposes:

Location.	Company.	Capital.
Toronto, Ont.,	Clarke Products, Limited	$40,000
Toronto, Ont.,	Canadian Chain & Jewelry Co., Ltd.	40,000
Morrisburg, Ont.,	The Beach Cheese Box Co., Ltd.	40,000
London, Ont.,	The London Mfg. & Machinery Co., Ltd.	45,000
Toronto, Ont.,	The Canadian Electric Time Switch Co., Ltd.	100,000
Toronto, Ont.,	Universal Electric Co., Ltd.	100,000
Toronto, Ont.,	The Hungerford Talc Co., Ltd.	50,000
Toronto, Ont.,	Dominion Truck & Transportation Co., Ltd.	1,000,000
Toronto, Ont.,	Textile Mfg. Co., Limited	50,000
Montreal, Que.,	Zenith Machine Co., Limited	50,000
Toronto, Ont.,	Dominion Adpress Co., Ltd.	150,000
Montreal, Que.,	Canadian Toy & Novelty Co., Ltd.	75,000
Windsor, Ont.,	Canada Model & Machine Co., Ltd.	40,000
Toronto, Ont.,	Curtiss Aeroplanes & Motors, Limited	50,000
Montreal, Que.,	Fred A. Lallemand Refining Co. of Canada, Ltd.	50,000
Ottawa, Ont.,	Efficiency Boiler Heating Co., Ltd.	100,000
Guelph, Ont.,	New Idea Spreader Co., Limited	250,000
Montreal, Que.,	Montreal Ammunition Co., Ltd.	300,000
Toronto, Ont.,	The Electric Chain Co. of Can., Ltd.	50,000
Montreal, Que.,	Quikanshur Mfg. Co., Ltd.	250,000
Ottawa, Ont.,	The Standard Valves Co., Limited	50,000
Maisonneuve, Que.,	United Last Co., Limited	250,000
Montreal, Que.,	The Mystery Tire Co. of Canada, Limited.	400,000
Montreal, Que.,	The Axle Valve Co., Limited	200,000
Windsor, Ont.,	Nyal Co., Limited	50,000

"MADE-IN-CANADA" EXHIBITION IN MONTREAL.

A "Made-in-Canada" exhibition will be held in the Arena, Montreal, April 10th to 17th, under the direction of "The Made-in-Canada Exhibition Syndicate." It will be opened by Sir Lomer Gouin, and is designed to familiarize buyers with Canadian-made goods. A number of charitable organizations will participate in the division of the proceeds.

BRITISH COLUMBIA MAY BUY SHIPS.

The question of buying ships in order to fight increasing freight rates is engaging the attention of British Columbia business men. British Columbia lumbermen have heard rumors that the lumber freight rates from British Columbia to Australia will be nearly doubled by interests in San Francisco which control the charter market of vessels. While shortage of tonnage is to some extent responsible for the increase in rates, it is felt that undue advantage is being taken of the situation by the shipping industries, consequently; the proposal to buy vessels or in some way assist vessel building is under consideration.

INFORMATION ABOUT CUBA.

The Government of Cuba has established a commercial museum and permanent exhibition, which is being conducted by the Bureau of Information of the Cuban Secretary of State. A special memorandum dealing with the opportunities open to Canadian manufacturers in Cuba can be secured from Mr. Francisco P. Caballero, Consul of Cuba, Toronto.

THE FREIGHT AUDIT COMPANY—ITS USE AND ABUSE.

(*From Traffic News.*)

Like the horde of locusts that pounced upon the green fields of ancient Egypt, is the multitude of freight audit companies springing up throughout the country. They are pouncing upon the hapless shipper and creating almost as much devastation as did the locusts in ancient times. We do not mean to decry the usefulness of the honest, straightforward, conscientious routing agency, independent traffic manager, or freight bill auditor.

A case recently came to our notice where a solicitor walked into a small shipper's store in a western town. He said he represented the X. Y. Z. Audit Company. The shipper said he thought his freight bills were all right. The solicitor said that, for only $10 a year, his concern would route all the shipper's traffic, quote all the rates he wanted, and audit his freight bills for 50 per cent. He then asked the shipper to permit him to examine his freight bills. Having been given a small number, he selected one at random and said: "There, what did I tell you? There is a heavy overcharge on that shipment. I will give you $10 for that freight bill if you will assign it to me." He laid the money down. Naturally the shipper, figuring that what was worth $10 to the solicitor was worth $10 to him, said he would keep the bill, but he signed for the service and paid for it. He then forwarded the freight bills to the home office of the concern, who returned them with the information they were correct.

For a concern, however, which simply acts as a medium to iron out the errors which fallible human beings must commit, there is a great and growing field.

WORK STARTS ON HUDSON'S BAY RAILWAY.

Three thousand men will begin work in April on the construction work of the Hudson's Bay Railway. The frost is rapidly leaving the ground, and they may be wanted sooner. From this place to Port Nelson a spring thaw has set in, and railway officials state it looks like a banner year for construction.

The right-of-way has been cleared of trees to within 40 miles of Port Nelson, and the grading work will be carried to this point by October. Supply caches are established from Split Lake to the bay with food for 5,000 men.

The Government's end of the work requires an additional force of 1,000 men, made up of engineers, rodmen, surveyors, bridge erectors, skilled labor and teamsters.

The wooden trestle over the Armstrong river will sustain traffic, and the material for the huge bridge over the Nelson river at Manitou Rapids will be rushed to the spot.

HUGE WAR ORDER FOR RUSSIA.

The *Montreal Gazette* in a recent issue stated, presumably on the authority of Senator Curry, that the Canadian Car & Foundry Company had received an order for shells to the value of $30,000,000 from the Russian Government. This story appeared in some of the afternoon papers of the same day, though without any definite statement from any official of the company. It was also stated in a despatch from New York on the following day, that the Canadian Car & Foundry Company would distribute this business as far as it could be handled among Canadian machine shops, and that arrangements had been made with the Westinghouse Air Brake Company to take a portion of the business which Canadian factories could not handle. It is stated that the contract runs for a year and its final size will depend upon the practicability of delivery. Estimates run as high as $80,000,000.

ELBERT HUBBARD ON INDUSTRIAL INVESTIGATIONS.

Elbert Hubbard, the Editor of the *Philistine*, has a light opinion of the reports issued after "industrial investigations."

In a recent number of the *Philistine* he gives the following description of the report of Colonel Frank P. Walsh, Chairman of the Federal Commission of Industrial Relations of the United States, on the philanthropic foundations, of which there are four: The Carnegie, the Rockefeller, the Russell Sage, and the Cleveland. "He gave a recipe," says Mr. Hubbard, "that he guaranteed would bring about industrial peace. His suggestions, as near as I can gather them, were these":

First, dissolve, by Government decree, the big Foundations, and distribute the money among the laborers from whom the money was embezzled.

Second, organize all labor by Federal law.

Third, hang any man running an open shop.

Fourth, establish a minimum wage of two dollars a day for section hands, ten dollars a week for telephone girls, and other laborers in proportion.

Fifth, establish a Government Board to listen to the grievances of all laborers and redress them without appeal.

Sixth, give the right to every laborer to fix the amount of wages he shall be paid.

Seventh, all employers to be compelled to give work to everybody who applies.

Eighth, withdrawal of tariff protection from all employers who fail to treat their workers properly.

Ninth, all honors and profits at end of year to be divided equally among the employees, the employer to make good all deficits, and if bankruptcy comes the employer is to shoulder the disgrace.

Tenth, change our present form of government so as to work the apotheosis of the weak, the inefficient, the wasteful, sending Dives to hell and putting Lazarus in his limousine.

Eleventh, any employer who gets gay to be fired on majority vote of employees.

GOVERNMENT SERVICE ON THE NATIONAL TRANSCONTINENTAL.

The Dominion Government contemplate running some kind of service over the Eastern portions of the National Transcontinental Railway, according to a statement made recently in the Senate by Senator Lougheed. The extent of this service has not been defined, but it is probable that the limited service already being maintained on certain portions will be considerably extended. It is stated that trains may be run from Quebec to Winnipeg at certain times of the week. Senator Lougheed also said that "omnibus objections" were being advanced by the Grand Trunk Pacific against their taking over the National Transcontinental. One of these objections is that the road is not yet technically complete.

"MADE-IN-CANADA" CAMPAIGN.

A large number of communications have been received by Mr. William P. Fitzimonds, Industrial Commissioner of the G.T.R., from United States manufacturing companies requesting information regarding suitable sites for the location of Canadian factories and for information as to the progress which the new campaign is making in Canada.

Hydro Power is Cheapest Under all Circumstances

To put in details of electric power rates is confusing to the average power user.

So, instead of making exhaustive comparisons, we make this broad, comprehensive statement, which we wish to be as emphatic as the English language will permit.

The Toronto Hydro-Electric System's Power Rates are cheaper under any and all circumstances than our competitor's Standard Rates as published.

Where such a certain saving is claimed, it would seem advisable at least to allow our Engineers to investigate your power situation and make you a complete report. If there is any money going out that can stay in your pocket, you surely want to know about it. Remember:

Hydro Motto is "Supply at Cost": Private Companies Operate for Profit

Our Engineers are competent men and their report to you commits you to nothing, costs you nothing.

We are at the other end of your telephone wire.

The Toronto Hydro-Electric System

226 Yonge Street **Phone Adel. 2120**

WHAT "MADE IN CANADA" MEANS.

A Liberal contemporary describes the "Made in Canada" campaign as an idea "to give Canadian goods an equal trial with other goods." It would be contrary to Liberal principles to give, we are informed, Canadian goods a little the better of it. In other terms, Liberals join in the "Made in Canada" campaign only in so far as Canadian goods are able to meet the keen competition of the goods of other countries set down in Canada.

The products of Canadian farm and factory owe nothing to such a campaign. If they can meet the competition of other and larger countries, then the goods will find a market. Self-interest would suggest to the Canadian that he buy the products of his own country if he can buy them of equal quality at equal price with anything else that the market affords.

A better and broader Canadianism is behind the "Made-in-Canada" campaign, if we are able to judge of the stalwart sentiment of these times. "Made in Canada" means that Canadian products of every kind and description shall be given a fair chance—something more than an "equal trial." Canada is a country of eight million people who are faced with all the problems of national development. In the process of this development it is necessary that there should be the utmost spirit of unity and good-will.

Canadians, being engaged in a common task, must stand together. If they, for instance, insist upon giving the foreign manufacturer and the foreign workingman an equal opportunity with the Canadian manufacturer and the Canadian workingman, it is evident that the foreigner is getting much the better of the deal, for the Canadian producer is accorded no similar favors in the foreign market such as are granted the foreigner in the Canadian market.—*London Free Press.*

BUSINESS CONDITIONS IN ST. JOHN, N.B.

The St. John, N.B., Board of Trade recently sent out a circular asking the following questions:

"Do you find evidence of improvement in the business situation ?"

"Is the Made-in-Canada movement having a beneficial effect ?"

A wholesale grocery firm, which is also engaged in spice manufacturing, replied is the following terms:—

"There are quite decided evidences of improvement in business in the steadying nature of the markets. The Made-in-Canada movement is certainly having a beneficial effect. We find that manufacturers, brokers, jobbers and retailers are all emphasizing it quite strongly."

A prominent firm of manufacturing confectioners remarked in their report: "We have had a very good increase in business from the first of the year. We feel that the Made-in-Canada campaign does help out, but there are too many concerns who are trying to sell on the motto rather than on the quality of their goods."

A wholesale shoe firm reported: "Business is about as usual; in fact our shipments were considerably ahead of February last year. Our retail department shows a slight increase also, therefore, as far as our business is concerned, we feel that it is about normal."

A leading firm of brush manufacturers replied most encouragingly:—

"Business so far as we are concerned has decidedly improved in the last six or eight weeks; so much so in fact that we are now busier than we have been since this time two years ago, and we have been forced to run overtime in some sections in our endeavor to catch up with our orders. This improvement is only to a very slight extent due to business arising from the war; it comes mainly from east of Winnipeg. We have no way of tracing the direct results of the Made-in-Canada campaign, but from our general observations have no doubt that this has been an influential factor in stimulating trade."

One of the largest tea and coffee houses in St. John, said:

"We find in the west a more hopeful feeling, but without much improvement in sales. In Ontario there is a decided improvement. In the east, trade, with the exception of a few places, is about normal. On the whole, it would appear that the outlook is most encouraging."

A prominent dry goods firm made this satisfactory report:

"We feel that the people of the Maritime Provinces have every reason to be thankful for the way business has kept up. Business was well sustained during the fall months and the Christmas trade was up to the phenomenal season of 1913, and now indications for the spring business seem to be still more favorable each week."

INSURANCE DEPARTMENT WELL REPRESENTED.

At the beginning of the war, Mr. Raymond Willis, director of Willis, Faber & Company, Lt., London, England, enlisted as a private in the West Kent Yeomanry. About seventy employees, or about 35 per cent. of the entire staff of the London office, followed his example and enlisted in various regiments. The company is paying full salaries during the duration of the war to the members of its staff on active military service and is also keeping their positions open. Mr. Willis has recently been given a commission as lieutenant in the North Somerset Yeomanry Reserve. Members of the Canadian Manufacturers Association will recall Mr. Willis' visit to Canada in 1914, when the Insurance Department of the Association was taken over by the Willis, Faber Company of Ontario, Limited, a branch of the London company.

BIG FACTORY FOR MONTREAL.

A new factory for the manufacture of shoe lasts has just started operations on Bennett Avenue, Maisonneuve. The plant, which is of the most modern construction, is adjacent to that of the United Shoe Machinery Company. Operations will be carried on under the style of The United Last Co., Limited. Coincident with the obtaining of a charter for this Company, a charter was also taken out under the Federal Companies' Act for the United Shoe Company of Canada, Limited, to carry on the Canadian business of the United Shoe Machinery Company. The authorized capital of the Last Company is $250,000, and of the Shoe Machinery Company, $1,000,000.

EQUIPMENT FOR AUSTRALIAN RAILWAYS.

The Department of Trade and Commerce, Ottawa, has received copies of twenty-one standard specifications of materials used by the Western Australia Government Tender Board. Canadian manufacturers who may be interested can inspect the specifications and receive further information by applying to the Department. (Refer file No. A 1435.)

The Franklin Steel Works, Joliett, Ill., who also operate a plant in Cambridge, Mass., have decided to open a branch factory in Hamilton for the manufacture of toe caulks for horseshoes. Incorporation has been applied for with a capital of $40,000. W. F. Pitcher of the Franklin Steel Works, Joliett, Ill., will be the treasurer and manager.



NOW READY

Some of the Best Sites in the

TORONTO HARBOR INDUSTRIAL DISTRICT

THE ADVANTAGES OFFERED HERE CANNOT BE DUPLICATED ELSEWHERE AT ANY PRICE

A Leading Manufacturer recently said :

"ASIDE FROM YOUR DISTRICT, INDUSTRIAL SITES WITH SIDINGS FROM MORE THAN ONE RAILWAY ARE EXTREMELY SCARCE AND AT PRICES THAT ARE ALMOST PROHIBITIVE."

Build now and save 25% in Construction Cost and 33⅓% of Cost on Land

We will be pleased to send you particulars of our special offer.

The Toronto Harbor Commissioners

50 BAY ST. ALEX. C. LEWIS, Secretary TORONTO, CANADA

5,000 FACTS ABOUT CANADA.

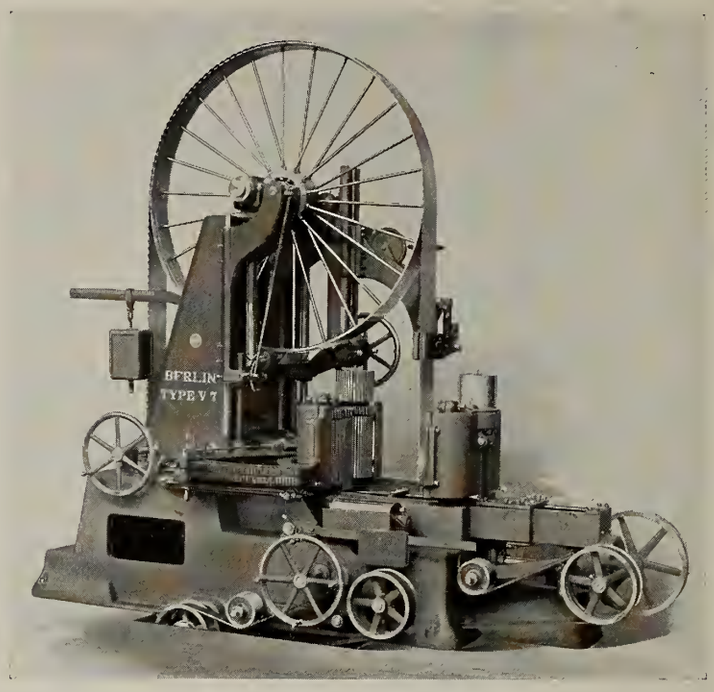
"Know Canada! make Canada known!" is a striking sentence in the War Year edition for 1915 of that popular booklet "5,000 Facts About Canada," compiled by Frank Yeigh, of Toronto. Copies may be had from progressive newsdealers, or by sending 25c. t othe Canadian Facts Publishing Co., 588 Huron Street, Toronto, Canada.

WORKMEN'S COMPENSATION IN BRITISH COLUMBIA.

A Workmen's Compensation Bill, which is practically a draft of the Ontario Act, has been introduced in the British Columbia Legislature by the Attorney-General, but the measure has been deferred for a year so that British Columbia may benefit from a year's experience of the Ontario Act before adopting the Act in its present objectionable form.

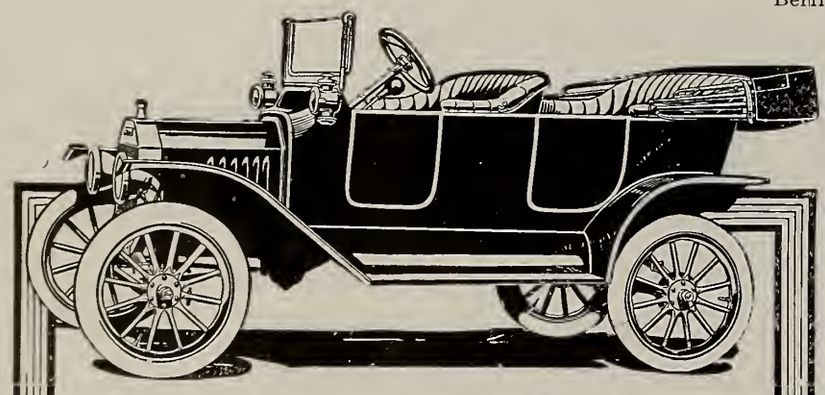
FOREIGN COMPANIES ACT IN SASKATCHEWAN.

The Supreme Court of Canada has given judgment in the case of the Linde Canadian Refrigeration Company to the effect that the John Deere Plow decision was effective as regards the Saskatchewan Foreign Companies' Act. This decision applies equally to the Act of Alberta and the Ordinance of the Yukon.



New Vertical Re-Saw.

The above machine carries 7 ft. wheels and identical machines are built in 64 inch, 6 ft. and 8 ft. wheel sizes. (Courtesy of the Berlin Machine Works, Hamilton, Ont.)



"MADE IN CANADA"

Ford Touring Car Price $590

No advance in the price of the "Made in Canada" Ford will be made because of the additional 7½% War Tariff. We as loyal Canadians will gladly absorb whatever increased duty we are forced to pay on such raw materials as cannot be obtained at home. The Ford is manufactured in Canada—not assembled in Canada.

The Ford Runabout is $540; the Town car $840; the Coupelet $850; the Sedan $1150—all fully equipped, f. o. b. Ford, Ont. Ford buyers will share in our profits if we sell 30,000 cars between August 1, 1914 and August 1, 1915. Write for Catalog (I-1).

Ford
THE UNIVERSAL CAR

TREASURER.

Large Manufacturing Corporation, established 1850, location, Canada, has a vacancy for a highly efficient business man as Secretary and Treasurer. Must be able to invest at least $5,000 cash, and give best of references as to ability and character. Contract with good salary guaranteed to right party. Investment absolutely secured. Answer in full or no attention paid. Box 12, INDUSTRIAL CANADA.

SALES MANAGER.

A Canadian Farming Implement Mfg. Corporation has an opening for an experienced sales manager, (preferably with experience in the above line), to take full charge of sales department. Attractive salary and commission contract guaranteed to right party. $2,500 cash investment and A1 references required. This is a high-grade proposition for a high-grade man. Correspondence treated strictly confidential. Box 13, INDUSTRIAL CANADA.

FACTORY SUPERINTENDENT.

Position vacant for a high-grade Factory Superintendent, with executive ability, to take full charge of all branches of a Farming Implement Factory in Canada. Applicant must be able to invest $2,500 cash and move at once to Ontario, Canada. Contract with good salary guaranteed to right party. Investment covered by guaranteed security. Apply Box 14, INDUSTRIAL CANADA.

GENERATOR FOR SALE.

One direct current generator, compound wound. Capacity 400. 16 C.P. lamps. 110 volts. Speed 1275 R.P.M. In first-class condition. Apply to Howard Smith Paper Mills, Montreal.

THIS IS NO TIME TO THROW MUD.

From the Farmers' Advocate.

Both political parties at Ottawa seem to be sparring for position. They expect something is going to happen, and if we are to believe the party press that something is an election. Some time ago we heard a great deal about the "party truce" which was established at the special war session last fall, but there never was a "truce" in the party press. Nasty little paragraphs have appeared in papers politically biased to one side or the other ever since that war session. They have gradually carried more and more of the sting of partyism, and now each side in the House is accusing the other of caviling to bring on an election. At this time nothing could better suit the purposes of Canada as a nation within an Empire at war than a suspension of hostilities on the part of two political parties. We have followed Britain's lead in other things, why not follow it again in connection with parliamentary procedure. Great Britain stands out pre-eminently as the fountain-head of good government and over there government and opposition are working together, are talking together, are thinking together for the good of the nation. In Canada it is different. Under cover of the white flag of truce the political mire has been and is being stirred up, and the sharpshooters and snipers on each side are busy throwing mud at the other fellow on the floor of the House as well as through the ever-ready press. Canada is engaged in a more serious business than should permit of political mud-raking. It requires the best ability of our statesmen to look after our real national welfare rather than to ferret out party inefficiencies, which are all too numerous no matter which party is in power. Let our representatives in parliament guard well our country at this time, and let them join hands to pilot our great ship of state until it reaches the harbor of peace to which we all look forward. Mud-slinging, loyalty and disloyalty cries, and carping criticisms of past party records are not in order now. There is a bigger and more important task before our country, and our politicians on both sides should be men of larger calibre than to break a "truce" in which the thinking public concurs over anything, but important business vital to the present interests of Canada.

GERMAN TOOLS IN CANADA.

"The Board of Trade of London, England, has promoted an interesting exhibition of German goods," says a despatch in the Montreal *Star*. It is intended to show British manufacturers what they are up against when they set out to capture the enemy's trade. A considerable section of the exhibit is taken up with German goods sold in Canada, the actual samples having been secured in the Dominion along with trade catalogues. This section consists principally of tools and hardware. British manufacturers who have inspected this section state that they are able to turn out the majority of the articles of a better quality shown and at same price the Germans ask. There are few lines which the British maker is willing to try to make in competition as they state that it would require special machinery and a new plant and then the trade might revert back to Germany after the war and the investment would prove a big loss to them. The Board of Trade has already lent over two hundred samples of goods, made by Germans and sold in Canada, to British manufacturers."

Will German tools come into Canada again after the war? Canadian manufacturers will try no doubt to supply them, but if they are not able to compete with the cheap labor of Germany, we have a weapon in our protective tariff, which Free Trade England unfortunately cannot use.

Polarine



Correct lubrication for your motor is as necessary as proper food for your body.

Don't wear out your motor by using the wrong oil.

Polarine assures freedom from breakdowns and easy motoring under all conditions of load and temperature.

The Imperial Oil Co.,
Limited

TORONTO WINNIPEG MONTREAL
ST. JOHN HALIFAX



The Ritz-Carlton Hotel

SHERBROOKE STREET, MONTREAL

offers the Comfort, Service and Cuisine of the famous Ritz chain of Hotels and Restaurants round the world, at similar rates to those of other leading hotels in Canada.

3

THE CANADIAN BANK OF COMMERCE

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L., President
ALEXANDER LAIRD, General Manager
JOHN AIRD, Assistant General Manager

Capital Paid-up - $15,000,000
Reserve Fund - - $13,500,000

Extension of Canadian Trade

The Bank will make enquiries into the possibilities and requirements of markets abroad for exporters or importers who desire to extend their trade with British colonies or possessions. Owing to the large number of its correspondents and agents it has unusual facilities for this work.

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . . $25,000,000
Capital Paid up $11,560,000
Reserve & Undivided Profits $13,000,000
Total Assets $180,000,000

HEAD OFFICE, MONTREAL

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H. S. Holt, President E. L. Pease, Vice-President
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C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

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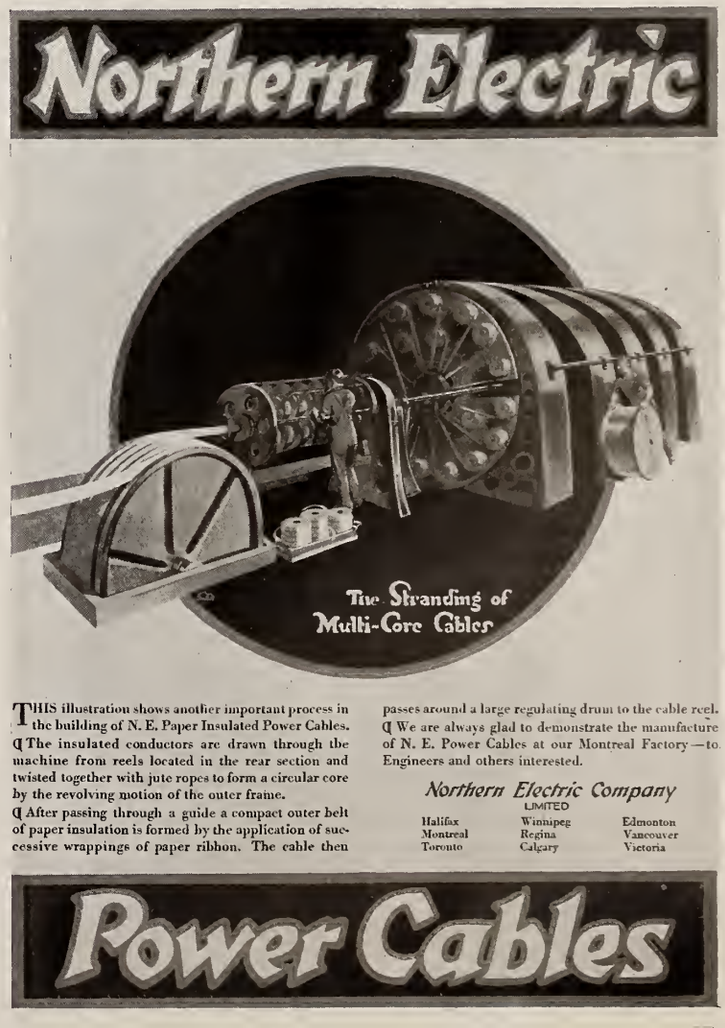
FREIGHT CHANGES

List of Freight Schedules filed with the Board of Railway Commissioners During Month of February, 1915

(The first column shows the old and the new numbers of the rate as it appears on the files of the Railway Commission; the second column gives the railway number. CL. stands for carload.)

C.R.C.	R.R. No.	Effective.	Description.
Canadian Pacific Railway.			
Sup. 24 W 1919	Sup. 24 W 3111	Feb. 9-15	Switching and interswitching at C.P. western line stations. Reduction.
Sup. 21 W 1973	Sup. 21 W 3240	Feb. 15-15	Class and Commodity rates between Vancouver, Westminster, Victoria and points east. Reissue. New rates.
Sup. 2 W 1991	Sup. 2 W 3293	Feb. 16-15	Competitive, import and proportional tariff from ports of call in the Orient to stations in Western Canada. Reissue. New rates.
Sup. 37 W 1615	Sup. 37 W 2443	Feb. 22-15	Lumber, shingles, etc., coast and interior mills to points in Eastern Canada. Reissue. New rates.
W 2019 cancels W 1920	W 3345 cancels W 3115	Feb. 20-15 (R) Mch. 15-15 (A)	Commodities C.P. and C.N. stations to Eastern Canada. Advance. Reduction.
W 2018 cancels W 1827	W 3344 cancels W 2907	Mch. 15-15	Commodities from C.P., C.N. and G.T.P. stations to points in the U.S. Advance. Reduction. New rates.
W 2020 cancels W 1885	W 3348 cancels W 3045	Feb. 20-15 (R) Mch. 15-15 (A)	Commodities stations on C.P. and C.N. to Montreal, Quebec, St. John and Halifax for export. Reissue. Advance.
W 2021 cancels W 2008	W 3350 cancels W3327	Mch. 22-15	Commodities between San Francisco, Oakland, Cal., etc., and points on C.P. western lines. Reissue. Reduction.
Sup. 22 W 1973	Sup. 22 W 3240	Feb. 25-15	Class and commodity rates between Vancouver, Westminster, Victoria and stations east to Port Arthur, inclusive. Advances, Reductions.
W 2025 cancels W 1789 W 1888	W 3357 cancels W 2828	Feb. 26-15 (R) Mch. 26-15 (A)	Class and commodity rates between Vancouver, Port Moody, etc., and stations on the E. & N. Ry. Reissue. New rates.
Sup. 3 W 1992	Sup. 3 W 3296	Apr. 1-15	Rules and regulations at C.P. and E. & N. stations. New rates. Reduction.
W 2027 cancels W 1919	W 3358 cancels W 3111	Mch. 5-15 (R) Apr. 5-15 (A)	Switching and interswitching at C.P. and E. & N. stations. Reduction. Advance.
Sup. 45 W 1806	Sup. 45 W 2866	Mch. 12-15	Lumber, shingles, etc., coast and interior mills to stations on C.P., C.N. and G.T.P. railways. Reduction. New rates.

C.R.C.	R.R. No.	Effective.	Description.
Canadian Pacific Railway.			
W 2031 cancels W 1969	W 3365 cancels W 3235	Mch. 12-15 (R) Apr. 12-15 (A)	Commodities between C.P. western line stations. Reduction. Advance.
Sup. 1 W 2020	Sup. 1 W 3348	Mch. 12-15	Salmon C.L. Vancouver, Victoria, Westminster, Esquimalt to Montreal, Quebec, W. St. John and Halifax for export. New rate.
Sup. 24 E 2189	Sup. 24 E 1785	Jan. 30-15	Commodities from C.P. stations to W. St. John and Halifax for export. Reduction.
Sup. 1 E 2920	Sup. 1 E 2553	Feb. 1-15 (R) Feb. 26-15 (A)	Iron and steel articles between C.P. stations. Advance. Reduction.
Sup. 2 E 2920	Sup. 2 2553	Feb. 4-15	Iron and steel articles between C.P. stations. Reduction.
E 2956 cancels E 2560	E 2592 cancels E 2167	Mch. 3-15	Import merchandise St. John and West St. John to stations on C.P. and connecting lines. Advance.
Sup. 3 E 2838	Sup. 3 E 2465	Feb. 18-15 (R) Mch. 18-15 (A)	Commodities between C.P. stations. Advance. Reduction.
Sup. 1 E 2933	Sup. 1 E 2568	Mch. 19-15	Commodities C.P. stations to points in the U.S. Advance. Reduction.
Sup. 2 E 2944	Sup. 2 E 2579	Feb. 23-15 (R) Mch. 23-15 (A)	Commodities C.P. stations and points on connecting lines to St. John and Halifax for Export. Advance. Reduction.
Sup. 4 E 2920	Sup. 4 E 2553	Mch. 29-15	Iron and steel articles between C.P. stations. Advance.
Sup. 5 E 2920	Sup. 5 E 2553	Mch. 6-15	Shell forgings Hamilton to Kingston. Reduction.
Sup. 6 E 2920	Sup. 6 E 2553	Mch. 8-15	Shell forgings between C.P. stations. Reduction.
Sup. 2 E 2919	Sup. 2 E 2552	Mch. 18-15	Commodities between C.P. stations. Advance. Reduction. Reissue.
Sup. 7 E 2920	Sup. 7 E 2553	Mch. 18-15 (R) Apr. 12-15 (A)	Iron and steel articles Between C.P. stations Advance. Reduction.
Sup. 24 E 2646	Sup. 24 E 2262	Mch. 15-15	Switching and interswitching at C.P. stations. Reduction.
W 2028 cancels W 1819 1958	W 3352 cancels W 2896 3220	Mch. 20-15	Mileage tariff on commodities between C.P. western line stations. Reduction.
Sup. 3 W 1991	Sup. 3 W 3293	Apr. 1-15	Import tariff Oriental ports to stations in western Canada. Reissue. New rates.
Sup. 23 W 1973	Sup. 23 W3240	Mch. 15-15	Class and commodity rates between Vancouver, Westminster and Victoria and stations east. New rates. Reissue.
Sup. 2 W 2019	Sup. 2 W 3345	Mch. 15-15	Commodities stations on C.P., C.N. and E. & N. railways to eastern Canada. Reissue. New rates.
Sup. 3 W 2019	Sup. 3 W 3345	Mch. 18-15	Commodities stations on C.P., C.N. and E. & N. railways to eastern Canada. Reissue. New rates.
Sup. 46 W 1806	Sup. 46 W 2866	Mch. 25-15	Lumber, shingles, etc., coast and interior mills to stations on C.P., C.N. and G.T.P. railways. New rates.
E 2975 cancels E 2926	E 2612 cancels E 2559	Mch. 20-15	Steel bars C.L. Hamilton, Sydney and Trenton, N.S., to Vancouver, Victoria, and Prince Rupert, B.C. Reduction.
Grand Trunk Railway.			
Sup. 1 E 3088	Sup. 1 E 55	Feb. 15-15	Nails, iron and steel bars, wire, etc., Hamilton to St. John and Halifax for export. Reduction.
Sup. 2 E 3088	Sup. 2 E 55	Mch. 22-15	Iron commodities to Atlantic seaboard for export. Advance. Reduction.
Sup. 2 E 3089	Sup. 2 E 56	Mch. 22-15	Commodities to New York, Baltimore and Philadelphia for export. Reduction.
Sup. 2 E 2995	Sup. 2 C.U. 92	Mch. 19-15	Commodities from Buffalo, Black Rock and Suspension Bridge, N.Y., to points in Canada. Reduction.
Sup. 17 E 2696	Sup. 17 I 144	Mch. 3-15	Import raw sugar, Portland, Me., to stations in Canada. Reduction.



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REDUCED ABOUT 80%

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Manufacturers' Automatic Sprinklers



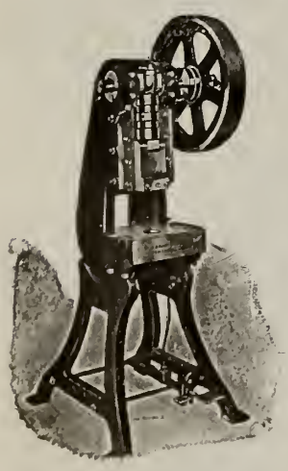
This reduction is recognition by Fire Insurance Companies of the reliability and efficiency of this sprinkler system, and amounts to a saving large enough to cover the cost of a complete equipment in five years or less.

NOW IS THE TIME to let us quote you on equipping your old or new plant.

DROP US A CARD BEFORE YOU FORGET

The General Fire Equipment Co., Limited

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POWER PRESSES

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CHIEF OFFICE FOR CANADA, TORONTO

LONDON & LANCASHIRE FIRE INSURANCE COMPANY LIMITED

ALFRED WRIGHT, Manager, 8 Richmond St. E.

C.R.C.	R.R. No.	Effective.	Description.
Grand Trunk Railway.			
Sup. 3 E 3084	Sup. 3 C.U. 99	Apr. 1-15	Commodities between G.T. stations. Reduction.
Sup. 4 E 3088	Sup. 4 E 55	Mch. 5-15	Commodities to Boston, Portland and St. John for export. Change.
Sup. 17 E 3035	Sup. 17 C.Y. 36	Mch. 15-15	Castings L.C.L. Hamilton to Kingston. Reduction.
Baltimore and Ohio Railroad.			
Sup. 3 1385		Mch. 25-15	Commodities B. & O stations to points in Canada. Reduction.
1448 cancels 1436		Feb. 23-15	Import raw sugar C.L. from Philadelphia and Baltimore to Wallaceburg, Ont. Reduction.
Pennsylvania Railroad.			
Sup. 1 JJ 77		Mch. 25-15	Iron and steel articles P.R.R. stations to points in Canada.
G.O. 1069		Apr. 3-15	Iron and steel articles P.R.R. stations to points in Canada.

PERSONAL.

Michael Helbronner, of Pringle and Company, Montreal, has been appointed engineer for a military district.

Arthur J. Darling, President of Darling Bros., Limited, engineers and manufacturers, died on March 5th, at his residence, 73 St. Luke Street, Montreal.

C. W. P. Ramsay, of the C.P.R., has been appointed commanding officer of the Canadian Overseas Railway Construction Corps with the rank of Lieutenant-Colonel.

George T. Merwin, formerly of the W. W. Butler Company, Montreal, has been appointed General Sales Manager of the Canadian Car & Foundry Company, Montreal.

Lieutenant-Colonel Lacey R. Johnson, who has been actively identified with the work of the C.P.R. since 1882, has been appointed general welfare agent of the company.

W. H. Hazlett, for fifteen years with the British Columbia Electric Railway Company, has joined the firm of A. G. Langley & Company, engineers and contractors, Vancouver, B.C.

AGAINST MAPLE ADULTERATION.

Hon. Pierre Blondin, Minister of Inland Revenue, has given notice of an amendment to the Inland Revenue Act which will tighten up the legislation of last session to prevent the adulteration of maple products, the provision having been found ineffective in its present form.

The reorganization of the Moose Jaw Flour Mills, Limited, is in progress. The mill, which has been standing in a partially completed state for the past year, will be operating in the course of a few months.

THE DENNIS WIRE AND IRON WORKS CO. LIMITED

LONDON CANADA

Best Steel Lockers Made

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

530a. **Handles.**—An Ontario manufacturer wants tea kettle and tea pot handles and knobs, made of wood with rubberoid finish.

531. **Concrete-making Machinery.**—A wholesale firm of contractors' supplies in Lyons desires to receive specifications and prices from manufacturers of concrete-making machinery.

532. **Shovels.**—A wholesale concern in Lyons is anxious to get in touch with manufacturers of shovels.

533. **Wheelbarrows.**—An agent in Paris wishes to receive quotations and catalogues from manufacturers of wheelbarrows.

534. **Flour, Corn and Wheatstarch.**—Agent in Alexandria, Egypt, states he has good openings for extension of Canadian trade in these lines. Style of package and terms required given on request.

535. **Paper Boards.**—A Melbourne firm desires immediate quotations on paper boards formerly obtained from Germany.

536. **Tweed, Cloth, Serges.**—Blue, grey, black; required at once for export in large quantities. Indication of price f.o.b. New York or Halifax or St. John, if possible c.i.f. Havre. Quantity ready for shipment and quantity available weekly.

537. **Blankets.**—For export, immediately required, cotton, cotton and wool, and wool blankets for men and horses, prices, f.o.b. New York or Halifax or St. John, or if possible c.i.f. Havre. Quantity ready for shipment and quantity available weekly.

538. **Hammers.**—A Cannock firm is open to purchase adze-eye claw-hammers in the rough state ready for finishing. An illustration is on file, A-1429, at the Department of Trade and Commerce, Ottawa.

539. **Asbestos.**—A Lancashire firm wishes to get in touch with Canadian producers of asbestos suitable for packing.

540. **Webbing and Upholstery Twines.**—A manufacturers' agent in Manchester is prepared to act as representative of Canadian manufacturers of furniture webbing and upholstery twines.

541. **Bentwood Chairs.**—A manufacturers' agent in Manchester is prepared to act as English representative of Canadian manufacturers of bentwood chairs.

542. **Rubber Goods.**—A manufacturers' agent in Manchester is prepared to act as English representative of Canadian manufacturers of rubber goods.

543. **Picture Mouldings.**—A manufacturers' agent in Manchester is prepared to act as English representative of Canadian manufacturers of picture mouldings.

544. **Doors, Door Frames and Windows.**—A Cape Town firm of agents for builders' supplies requests correspondence with Canadian firms prepared for export of inside doors,

Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B. in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth) East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

For rates of freight and other information apply to

ELDER DEMPSTER & CO., Limited
318-319 BOARD OF TRADE BUILDING - - MONTREAL
Toronto Agent: S. J. SHARP, 19 Adelaide E.

THE
New Zealand Shipping Company, Limited
CANADA
TO
Australia and New Zealand

Regular monthly sailings from Montreal in summer and St. John in winter, calling at Adelaide, Melbourne and Sydney (Australia), and Auckland, Wellington, Lyttelton and Dunedin (New Zealand). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

The New Zealand Shipping Co.
LIMITED
213 Board of Trade Building, Montreal

door frames and windows. Illustration and price list of articles on file at the Department of Trade and Commerce, Ottawa.

545. **Cornice Moulding.**—A South African agent for builders' supplies asks to be placed in touch with Canadian exporters of cornice moulding. Price list of article required on file at the Department of Trade and Commerce, Ottawa.

546. **Dried Milk Powder.**—A London firm asks to be placed in touch with manufacturers of dried milk powder in Canada.

547. **Flour, Butter and Cheese.**—A correspondent at Alexandria, Egypt, asks for names of Canadian manufacturers of flour, butter and cheese.

548. **Wire Nails, Hay Rakes, Brooms, etc.**—A manufacturers' agent at Belfast asks for names of Canadian manufacturers of wire nails, hay rakes, brooms, whisks and brushes, baling wire, fencing wire and barbed wire, wishing to appoint agents in Ireland.

549. **Bar Iron.**—A corporation in Paris engaged in the building trade wants to get in touch with manufacturers of iron bars and structural steel.

550. **Smoked and Salted Salmon.**—An agent in Paris desires to communicate with packers of smoked and salt salmon for purposes of purchase or representation.

551. **Patent Rights.**—A London firm wishes to get in touch with a Canadian manufacturer willing to undertake the working of their patent rights in a patent steel wheel for heavy transport vehicles; also a miniature steam generator electric lighting outfit for public service vehicles, omnibuses, etc.

552. **Dowels.**—A Liverpool firm who are importers of dowels would be pleased to hear from Canadian manufacturers who can fill export orders.

553. **Cobalt and Nickel Products.**—A London firm desires the addresses of Canadian manufacturers of cobalt and nickel oxide, metal, and other products, in which they state they are in a position to do business.

554. **Buttons—Ivory, Pearl and Imitation Pearl, Metal, Pant and Overall.**—A firm of manufacturers' agents in Manchester is prepared to act as representative of Canadian manufacturers of ivory, pearl and imitation pearl buttons, also metal buttons for pants and overalls.

555. **South African Commission Agency.**—A South African manufacturers' agent is prepared to take up agency for Canadian-made handles of all kinds, also furniture, chairs (cheap), folding chairs, and general household hardware. Catalogues with f.o.b. prices Montreal or St. John requested.

556. **Tables and Bedroom Furniture.**—A Port Elizabeth firm are prepared to purchase direct or act as agents for a Canadian manufacturer of cheap extension tables and bedroom furniture, which must be packed in the knock-down state. Immediate correspondence requested.

557. **Cereals.**—A Liverpool firm of grain merchants, claiming an extensive connection in wheat, barley, oats and peas, solicits correspondence from Canadian shippers with a view to the establishment of business.

558. **Pulp and Paper.**—A gentleman in France desires to get in touch with Canadian pulp mills with a view to placing their products in France. He would also like to get in touch with large paper factories dealing exclusively in: (1) the newspaper article, finished and pressed, in reams and rolls (news print); (2) commercial envelopes, official and commercial size; (3) all ordinary white papers, colored, having in stock considerable quantities, in a position to reply to all requests by return mail.

559. **Flour.**—One of the leading firms in Barbados, with connections in the other islands, desires an agency for a leading brand of Canadian flour.

560. **Needles, Safety Pins, Buttons, Etc.**—The following articles are required immediately for export to France: needles, safety pins, buttons, felt slippers, threads.

561. **Confectionery.**—A London company who are already handling a Canadian confectionery line and whose travellers cover the whole of the United Kingdom, are desirous of representing, on a commission basis, Canadian manufacturers of fondants, chocolates and other candies, for which they report a good opening.

562. **Oatmeal and Rolled Oats.**—A London firm wishes to hear from Canadian manufacturers of oatmeal and rolled oats, of which they wish to purchase considerable quantities.

563. **Stove Castings.**—A Paris oil stove factory desires to get in touch with manufacturers of stove castings.

564. **Iron, Copper, Lead Nickel.**—A Paris engineer wishes to be put in touch with producers of the above mentioned and other minerals.

565. **Jam, Salted Meat, Wheat.**—A produce dealer in Marseilles invites correspondence from salted meat packers, jam manufacturers and wheat exporters.

566. **Steel, Irons, Bars, Galvanized Iron.**—A French agent is desirous to represent Canadian manufacturers of steel, irons, bars, galvanized iron.

567. **Duck, Canvas, Saddle Buckles, Threads.**—A firm is desirous of entering into relation with Canadian firms in a position to supply duck, canvas, saddle buckles, threads, as used in military equipment.

568. **Bicycles and Sewing Machines.**—A French firm is desirous of getting into touch with Canadian manufacturers of bicycles and sewing machines.

569. **Parchment Paper.**—A firm in Edmonton, Alberta, desires to secure the names of Canadian manufacturers of genuine parchment paper.



and travel via THE

CANADIAN ROCKIES

to the

PANAMA PACIFIC EXPOSITION

If you are planning your 1915 trip to San Francisco, make sure your ticket reads via Canadian Pacific, otherwise you will miss the grandeur beauty of nature's most stupendous works—The Canadian Rockies.

BANFF LAKE LOUISE FIELD GLACIER

Are important tourist stop-over points on the Canadian Pacific Railway route to the Pacific Coast. These have excellent hotel accommodation, with opportunties for riding, climbing, swimming, boating and golf.

Agents will personally call on you to arrange your itinerary.

Write, phone or call on nearest C. P. R. Representative.

E. F. L. STURDEE,
Asst. District Passenger Agent,
Toronto

M. G. MURPHY,
District Passenger Agent,
Toronto

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Lethbridge, Alta.

It is stated that the C.P.R. has lodged an injunction against the removal of the Knight Sugar Company plant from Raymond, Alta., to Layton, Utah.

Medicine Hat, Alta.

A big interest in the Purmal Brick Company has been taken over by the Creelman Contracting Company, and in future the plant will be known as the Gas City Brick Company.

BRITISH COLUMBIA.

Brilliant, B.C.

The Doukhobor Society at Brilliant are completing the installation of a plant for the manufacture of wood pipe for waterworks, and propose to turn out all their requirement for the extensive irrigation systems which they are installing at their various settlements. The Society also intend manufacturing clay products, tiles, crocks, etc., from deposits on their property.

Burrard Inlet, B.C.

The Imperial Oil Company have put into operation their new plant on Burrard Inlet near Vancouver, the opening being celebrated by the visit of about four hundred representative business men from Vancouver. The site of the refinery is eighty-five acres in extent and the plant is very complete for the manufacture of gasoline, naptha, lubricating and fuel oils from Peruvian crude oil, which the company bring in their own steamers direct from Lobotos, Peru. Tank steamers berth at the Company's own wharf, and the storage space for both crude and refined oil is provided in thirty-seven tanks, the largest having a diameter of 115 feet, with a capacity of 2¼ million gallons—the largest in Canada. It is stated that it is later the intention to ship the refined products to the Oriental markets and possibly Australia.

Coquitlam, B.C.

The Government having commandeered their supply of trinitrotoluol, the works of Sabulite, Ltd., explosives manufacturers, at Coquitlam, have been closed down. The order does not affect the operation of the extensive works of either the Canadian Explosives Company, Ltd., near Victoria, nor the Giant Powder Company, Inc., at Nanoose Bay, who manufacture other grades of explosive.

Kennedy, B.C.

P. Grace & Company will shortly commence operation of a furniture factory at Kennedy, B.C.; native cottonwood will be largely used at the commencement. The plant will be electrically operated.

New Westminster, B.C.

Raven & Mann, New Westminster, are considering the erection of a lumber mill on the Fraser River in Mission City district.

Princess Camp, B.C.

The British Columbia Copper Company announce intention to build a concentrator at Princess Camp, near Princeton, where diamond drilling has demonstrated a large body of ore. Accommodation for a large mining population is being provided, and a considerable force of men has been kept at work during the winter.

Revelstoke, B.C.

The city of Revelstoke are installing a new 1,400 h.p. turbine at their power station, making the available power 2,550 h.p.

Surrey, B.C.

Henry Hodek and associates will shortly put in operation a brick and tile plant at Surrey, specialising in facing and fancy brick and tiling.

Vancouver, B.C.

The Imperial Oil Company has completed its new refinery on Burrard Inlet near Port Moody.

The Shell Petroleum Company, at present importing oil from California, are stated to be in negotiation for a site for a refinery near Vancouver.

Vanderhoof, B.C.

The planing and lumber mills of the Vanderhoof Power Company are expected to be in operation very shortly, the electric plant and water system commenced last fall now being completed.

Westminster, B.C.

G. W. Laidlaw has transferred his plant from Vancouver to Westminster, having taken over the building formerly occupied by the Westminster Nail Company, and has installed additional machinery for the manufacture of wire products and barrel hoops.

NOVA SCOTIA.

Sydney, N.S.

Work is being rushed on the new explosive base manufacturing plant in connection with the Dominion Steel Company's coke oven for the manufacture of toluol.

ONTARIO.

Cornwall, Ont.

Frank R. White, of New York, formerly of Cornwall, has been in town with a view to interesting local people in the establishment of a branch of the American Master Organ Company, of New York, in Cornwall.

Drayton, Ont.

The addition of a wing to their factory is being considered by Buckman Bros., basket and box makers.

Grimsby, Ont.

The Imperial Oil Company of Toronto have been granted a permit to erect two large steel oil tanks, a pump house and a pipe line on the G.T.R. property on the south line of the G.T.R. track.

T H E · H O M E · I N · I T S · M A K I N G



"Many a thing divinely done by Chippendale and Sheraton."
—ANDREW LANG.

A Sheraton Dining-Room Suite

BY THE TORONTO FURNITURE COMPANY

SPEAKING of a noted American artist, a certain critic declared that he was successful because he knew what to leave out. The same thing with equal truth may be said of Sheraton and his work.

Imbued with a strong sense of the practical, he made furniture so severely plain as to be almost devoid of ornament. Yet on account of, rather than despite, its Puritan simplicity and complete frankness of line and contour, it possesses an irresistible charm and staunch serviceability that make it eminently suited to the requirements of the modern home.

Not a little of the pleasure one derives in contemplating this Sheraton suite is due to the knowledge that its price is no higher than that demanded for ordinary furniture, lacking its fine grace and distinction. For the simplicity which makes the Sheraton design so charming is also a factor in its low cost, thus uniting with its other virtues that of economy as well.

A representative collection of our furniture in this and the other notable periods in English and French cabinet making may be seen at the leading dealers in your town.

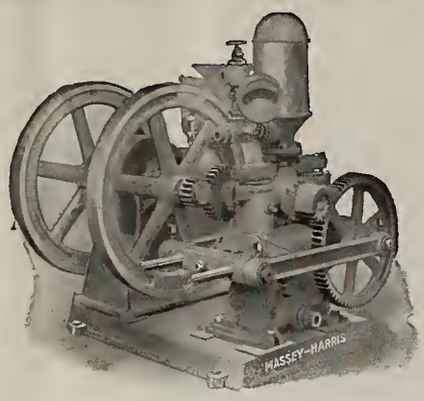
Our Handsome Booklet on Period Furniture *describes fully the origin, history and development of the prevailing "period" styles and how to distinguish them. It will be mailed to any address for 25c. in stamps or silver. As a practical illustrated guide book to good furniture, it should be read by everyone who intends to furnish a new home or refurnish an old one. It is filled with valuable ideas and much useful information.*



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TORONTO FURNITURE CO., LIMITED

SHOWROOMS AND CABINET SHOPS: 163-187 DUFFERIN ST., TORONTO



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For the Contractor and Builder

FOR construction work of various kinds, a Massey-Harris Gasoline Engine will be found most useful. Above is shown one of our Engines connected direct to a Pump, and below is an Engine connected direct to a Diaphragm Suction Pump. Both of these combinations are very handy.

The Massey-Harris Contractor's Hoisting outfit is an indispensable part of the contractor's equipment. The engine is geared direct to the Hoisting Drum, although, when required for other purposes, it can be detached.

These Engines are also furnished in Portable outfits, from 4½ horse power up, mounted on steel-wheeled trucks. A reputation for reliability, economy and convenience is what Massey-Harris Gasoline Engines have won for themselves throughout Canada and the United States, and every one sold brings in somebody else who wants one.

Information as to dimensions and prices of Engines may be had from any Massey-Harris Agent, or by writing direct to any of our Branches.

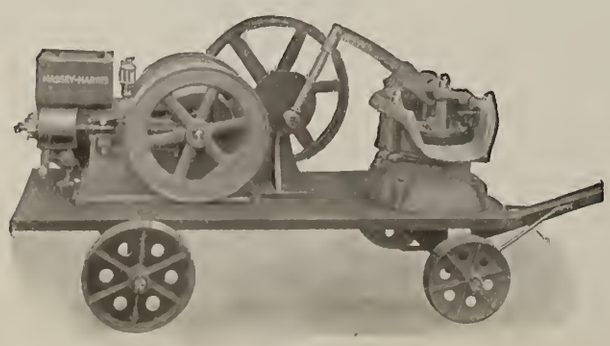
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HEAD OFFICES, TORONTO, CANADA

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Saskatoon Swift Current Yorkton Calgary Edmonton

Agencies Everywhere



Guelph, Ont.

The Sterling Rubber Company are building an addition to their factory.

The International Malleable Iron Company are employing a full staff, and during the last two months ran day and night.

The George B. Jackson Company has started a factory here for the manufacture of all sorts of railway signals, torpedoes, etc.

Hamilon, Ont.

It has been announced by Mayor Walters that the Street Railway Company will put on ten more cars on April 1st, and all the employees who were laid off will start to work again.

The Proctor-Gamble Company, which is building a large plant in this city, has contracted to take Hydro power.

A new industry, to be known as the Dominion Sheet Metal Company, Limited, capitalized at $300,000, will locate at Hamilton to manufacture galvanized sheets, of which there was about 68,000 tons used in Canada last year, all of which was imported. The bulk of the stock in the new company is held by Ohio and Indiana parties and the new factory will be managed by A. T. Enlow, of Oshawa, Ont., who, before going to Oshawa two years ago, was connected with the Stark Rolling Mill Company and the Berger Manufacturing Company, of Canton, Ohio. A site of four and one-half acres has been purchased in the east end of Hamilton and work will be started at once on the buildings. Employment will be given to about 100 people and the annual output at the start will be 15,000 tons.

Listowel, Ont.

The erection of a branch of The City Dairy Company, Spadina Crescent, Toronto, in this town is being considered by that company.

London, Ont.

The organization of a factory for the manufacture of electrical supplies is being made by ex-General Manager Glaubitz of the Utilities Commission.

Morrisburg, Ont.

F. W. Beach is contemplating the erection of a factory for the manufacture of cheese boxes.

Preston, Ont.

Canadian Buffalo Sled Company will build an addition to their factory in the spring.

Rondeau Park, Ont.

The contract for the wire work for the aviary and deer park on the Government Reserve has been awarded to the Page Wire Fence Company.

Toronto, Ont.

The city office of the Steel Company of Canada will be removed about April 1st from 69 Bay Street to the ninth floor of the Traders Bank Building.

COTTON & WOOL WASTE

Made in Canada

BRANDS:

Cotton Polishing: Cream.

White Cotton Wiping: XXX Extra, X Grand, XLCR, X Empire, X Press.

WASHED COTTON WIPERS

Colored Cotton Wiping: Fancy, Lion, Standard, Popular, Keen.

Wool Packing: Arrow, Axle, Anvil, Anchor.

Washed Cotton Wipers: Select White, Mixed Colored, Dark Colored.

Packed in Compressed Bales 500, 200, 100, 50, 25, 10, 5 lbs.

No liquid dope or clay used in any of our brands—nothing but threads.

SCYTHES & COMPANY, LIMITED

MANUFACTURERS AND JOBBERS

Also headquarters for Cordage, Twines, Cotton Duck Oiled Clothing, Etc.

TORONTO
MONTREAL

Windsor, Ont.

The factory of the Morand Canning Company, at Tecumseh, has been purchased by the Canadian Canners, who are asking the township of Sandwich East for exemption from taxation.

Zurich, Ont.

The Zurich Flax Company have sold their mill to Arnold Heideman.

QUEBEC.

Bedford, Que.

The Bedford Manufacturing Company will probably rebuild their factory, providing more adequate fire protection.

Bordeaux, Que.

A loss estimated at $50,000, including machinery, has been sustained by Messrs. Gingrass & David, 6255 De St. Real Street, through the burning of their sash and door factory.

Contrecoeur, Que.

Machinery and equipment will be purchased by the St. Lawrence Tanning Company, Limited, 51 Gabriel St., Montreal, for a two-storey factory and storage warehouse, estimated to cost $15,000.

Montreal, Que.

A building to cost between $100,000 and $125,000 for the new St. Antoine market will be erected in the spring. A special refrigerating apparatus will be installed.

The Canada Bread Company, Limited, will purchase interior fittings and machinery for additions to their bakery plant. The estimated cost of the building is $18,000.

The Canada Consolidated Rubber Company have decided upon a million-dollar preferred stock issue. The proceeds of the new issue will be used to increase the equipment at the Berlin tire factory.



$141,017.00 worth of abrasive wheels imported into this country in the last fiscal year, that should have been "MADE IN CANADA."

We can furnish the Canadian made goods of the best natural and artificial abrasives, by the vitrified or silicate process; in the latter, with or without the wire web.

Can be obtained from the following supply houses:

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McDOUGALS LTD. Ottawa
COWAN HARDWARE CO. London
WALKERVILLE HDW. CO. Walkerville
NORTHERN CAN. SUP. CO. Cobalt

Or direct from the manufacturers,

DOMINION ABRASIVE WHEEL CO., LTD
NEW TORONTO, ONT. CANADA

When writing advertisers, please mention INDUSTRIAL CANADA.

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*Dominion Abrasive Wheel Co., New Toronto, Ont.

ACCOUNT BOOKS
*The Brown Bros., Ltd., Toronto.

ACETYLENE GAS BURNERS
Economic Acetylene Burner Co., Toronto.

ACIDS
*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES
Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES
Charles Gurd & Co., Ltd., Montreal. Que.
J. J. McLaughlin, Ltd., Toronto.

AIR WASHERS
*The Canadian Sirocco Co., Windsor, Ont.

ALCOHOL
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE
E. L. Drewry, Winnipeg, Man.

ALUMINUM
*Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

ALUMINUM CASTINGS
*Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA
Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS
*The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS
*T. Pringle & Sons, Montreal.

ASBESTOS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEATHING:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

ATHLETIC UNDERWEAR
Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES
*Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
*Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:
*Tallman Brass & Metal Co., Hamilton.

AUTOMOBILE PARTS
*Dominion Stamping Co., Walkerville, Ont.

AWNING CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

AWNINGS
*Smart-Woods, Ltd., Montreal.

AXLES
Canada Forge Co., Ltd., Welland. Ont.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL
Alonzo W. Spooner, Limited, Port Hope Ont.
*The Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BACON
E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS
*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

BAGS, Cotton
The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute
The Canadian Bag Co., Ltd., Montreal. Que.
*Scythes & Co., Ltd., Toronto.

BAGS, travelling
J. Eveleigh & Co., Ltd., Montreal. Que.
Lamontagne, Ltd., Montreal, Que.
The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN
*Berry Bros., Ltd., Winnipeg, Man.

BAND RESAWS:
*Berlin Machine Works, Ltd., Hamilton.

BANK AND OFFICE RAILINGS
*The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS
The Canadian Office & School Furniture Co., Ltd., Preston. Ont.

BANK RAILINGS and CAGES:
*Canada Wire and Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS
*Tallman Brass & Metal Co., Hamilton.

BARS, iron
London Rolling Mill Co., Ltd., London, Ont.

BARS, steel
London Rolling Mill Co., Ltd., London. Ont.

BASEBALL GOODS
A. J. Reach Co., Toronto.

BATHS, enamelled
Amherst Foundry Co., Ltd., Amherst. N.S.

BATTERIES, dry
The Canadian National Carbon Co., Ltd., Toronto.
Canadian Carbon Company, Ltd., Toronto.

BEARINGS:
*The Chapman Double Ball Bearing Co., Ltd., Toronto.
The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS, bronze
*Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding
*Otterville Mfg. Co., Ltd., Otterville. Ont.
*Smart-Woods, Ltd., Montreal.

BEEF
E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER
E. L. Drewry, Winnipeg, Man.

BELTING, chains.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather
The Beardmore Belting Co., Ltd., Toronto.
*J. L. Goodhue & Co., Danville, P.Q.
*Sadler & Howarth, Montreal.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Limited.

BENT GOODS
The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES
*Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS
Samuel May & Co., Toronto.

BISCUITS
The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:
*A. C. Leslie & Co., Montreal.

BLANK BOOKS:
*Morton, Philips & Co., Montreal.

BLANKETS
Slingsby Mfg. Co., Ltd., Brantford. Ont.

BLANKETS, horse
Slingsby Mfg. Co., Ltd., Brantford Ont.
*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES
Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER
Canadian Salt Co., Ltd., Windsor Ont.

BLOWERS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS
*Canadian H. W. Johns-Manville Co., Toronto.
Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.
*M. Beatty & Sons, Ltd., Welland, Ont.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
*Polson Iron Works, Ltd., Toronto
J. & R. Weir, Montreal, Que.
Taylor-Forbes Co., Ltd., Guelph Ont.
*Jenckes Machine Co., Sherbrooke.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, heating:
*The Goldie & McCullough Co., Ltd. Galt.

BOILERS, hot water or steam
Warden King, Ltd., Montreal, Que.

BOILERS, steam.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
Steel and Radiation Ltd., Toronto.
Warden King, Ltd., Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:
*The Waterous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.
*The Bawden Machine Co., Limited, Toronto.

BOILER STANDS
Anthes Feundry Ltd., Toronto.

BOLSTERS
*Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:
*The National Acme Mfg Co., Montreal.

BOLTS AND NUTS:
*The Canadian Tube & Iron Co., Ltd., Montreal, Que.
*The Steel Co. of Canada, Ltd., Hamilton.
Starr Mfg. Co., Ltd., Dartmouth, N.S.

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R. G. McLean, Toronto.
*The Brown Bros., Ltd., Toronto.

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BOOKLETS
Stone Limited, Toronto.
R. G. McLean, Toronto.

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J. Leckie Co., Ltd.
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Samuel May & Co., Toronto.

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*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

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The Arlington Co. of Canada, Ltd., Toronto.

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The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

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BRANDS, burning
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The James Morrison Brass Mfg. Co., Ltd., Toronto.
*The Kerr Engine Co., Ltd., Walkerville.
*Tallman Brass & Metal Co., Hamilton.

*For Display Advertisement See Index, Page 885

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Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

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*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

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*Tallman Brass & Metal Co., Hamilton.

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Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

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*Tallman Brass & Metal Co., Hamilton.

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Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special
Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
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National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed
National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer
National Brick Co. of Laprairie, Laprairie, P.Q.

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*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

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BURLAPS, decorative
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CABLES, wire
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*The B. Greening Wire Co., Ltd., Hamilton.

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American Can. Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit
American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin
A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty
A. R. Whittall, Montreal.

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*Smart-Woods, Ltd., Montreal.

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CARBON BRUSHES
Canadian Carbon Co., Ltd., Toronto.

CARBON PRODUCTS
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CARBONATING MACHINERY
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CARBONS, arc light
Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame
Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS
Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM
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CARDBOARD
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Toronto Carpet Mfg Co., Ltd. Toronto.

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Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

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Toronto Carpet Mfg. Co., Ltd., Toronto.

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CARRIERS, box and barrel
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CARRIERS, brick
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

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*Canadian Car & Foundry Co., Ltd., Montreal, Que.

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*Sheldons, Ltd., Galt.

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Harris Lithographing Co., Toronto.

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*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

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*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

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*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.
*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal. Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Record Foundry and Machine Co., Moncton, N.B.
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John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

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*Galt Malleable Iron Co., Ltd Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:
*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

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Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA
Canadian Salt Co., Ltd., Windsor Ont.

CEMENT GUNS
Steel and Radiation, Ltd., Toronto.

CHAIRS, assembly hall
Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding
Stratford Mfg. Co., Ltd., Stratford Ont.

CHAIRS, rattan and upholstered
Imperial Rattan Co., Ltd., Stratford, Ont.

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*The Grasselli Chemical Co., Ltd. Toronto.
*The Nichols Chemical Co., Ltd. Montreal.

CHEMICAL LABORATORY APPARATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM
Canadian Chewing Gum Co., Ltd., Toronto.

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Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO
Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel
The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS
*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S
*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS
*Canadian H. W. Johns-Manville Co., Toronto.
*Goderich Organ Co., Goderich, Ont

CLOTHING
John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw
The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton
Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.
*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.

COATS
Peerless Overall Co., Rock Island, Que.

COBALT OXIDE
The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COCOA AND CHOCOLATE PREPARATIONS
Walter Baker & Co., of Canada, Ltd., Montreal, Que.

COFFEE
S. H. Ewing & Sons, Montreal, Que.

COFFEE IMPORTERS, Roasters and Manufacturers
C. H. Cochrane & Co., Ottawa, Ont.

COLD DRAWN SCREW STEEL:
*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD DRAWN SHAPES, flats, squares and hexagons:
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS
John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS
The Arlington Co., of Canada, Ltd., Toronto.

COLLARS
The Standard Shirt Co., Ltd., Montreal, Que.

COLLARS, coated linen
Parsons & Parsons Canadian Co., Hamilton, Ont.

COLLARS AND CUFFS waterproof
Williams, Greene & Rome, Berlin, Ont.

COLORS
Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin Williams Co. of Canada, Ltd., Montreal, Que.

COMBS, fine dressing and name
The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERS
Rolph & Clark, Ltd., Toronto.

COMMERCIAL STATIONERY:
*Brown Bros., Ltd., Toronto.
*Morton, Phillips & Co., Montreal.

CONCENTRATORS:
*Jenckes Machine Co., Sherbrooke.

CONCRETE COATINGS, paints, etc.
The Imperial Varnish & Color Co., Ltd., Toronto.

CONDUITS FOR INTERIOR WIRING
*Conduits Company, Ltd., Toronto.

CONFECTIONERY
Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Limited, Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTRACTORS' PLANT
The Western Steel & Iron Co., Ltd., Winnipeg, Man.
*M. Beatty & Sons, Ltd., Welland, Ont.

CONVEYORS:
*Dodge Mfg. Co., Ltd., Toronto.
*Jenckes Machine Co., Sherbrooke.

*For Display Advertisement See Index, Page 885

COOLING APPARATUS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

COPPER:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS
*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

COPPER TUBING, seamless
Canadian Seamless Wire Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPERWARE AND LANTERNS
Sheet Metal Products Co. of Canada, Ltd., Toronto.

COPPER WIRE
Canadian Seamless Wire Co., Ltd., Toronto.

CORKS
S. H. Ewing & Sons, Montreal, Que.

CORK CARPET
Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORRUGATED BOXES:
*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS
Dominion Corset Co., Quebec, Que.

COTTONADES
Hamilton Cotton Co., Hamilton, Ont.

COUPLERS
*Canadian Steel Foundries, Ltd. Welland, Ont.

COUPLINGS:
*Dodge Mfg. Co., Ltd., Toronto.

CRANKSHAFTS
Canada Forge Co., Ltd., Welland. Ont.

CREAM CHEESE, Ingersoll
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS
De Laval Dairy Supply Co., Ltd. Montreal, Que.

CREAMERY AND CHEESE FACTOR MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Peterboro, Ont.

CREOSOTED MATERIALS:
*The Dominion Creosoting Co., Ltd. Vancouver, B.C.

CRUSHED STONE
The Hagersville Contracting Co., Ltd., Hagersville, Ont.

CRUSHING ROLLS:
*Jenckes Machine Co., Sherbrooke.

CUES
Samuel May & Co., Toronto.

CUFFS
The Standard Shirt Co., Ltd., Montreal, Que.

CUPOLAS,
*Sheldons, Ltd., Galt.

CUPS, presentation
Standard Silver Co., Toronto.

CUPS, grease and oil
*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR
Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille
Hamilton Cotton Co., Hamilton, Ont.

CUTLERY
Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.

DENIMS
Hamilton Cotton Co., Hamilton, Ont.

DERAILS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS
Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.
Grip, Ltd., Toronto.

DINING ROOM SUITES
The George McLagan Furniture Co., Limited, Stratford, Ont.

DIES
*Butterfield & Co., Rock Island, P.Q.

DISINFECTING APPARATUS
Spramotor Co., London, Ont.

DOOR HANGERS
*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS
Daly & Morin, Montreal, Que.

DREDGES
*M. Beatty & Sons, Ltd., Welland, Ont.

DRESSING, belt
Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS
J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.

DRIFT BOLTS OR SPIKES
London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:
*Canadian Billings & Spencer, Ltd., Welland.

DRY CELLS, electric
Canadian Carbon Co., Ltd., Toronto.

DRY COLORS
P. D. Dods & Co., Ltd., Montreal, Que.
The Imperial Varnish & Color Co., Ltd., Toronto.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DRY KILN EQUIPMENT
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

DUMB WAITERS
Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.

DYERS AND FINISHERS
R. Parker & Co., Toronto.

DYNAMITE
Canadian Explosives Ltd., Montreal, Que.

DYNAMOS.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating
*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN
Galt Knitting Co., Ltd., Galt.

ELECTRIC APPLIANCES.
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd Hamilton.

ELECTRICAL COMPOUNDS
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRICAL AND GAS FIXTURES
The Garth Co., Montreal, Que.
The James Morrison Brass Mfg Co., Ltd., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.
*Packard Electric Co., Ltd., Toronto.

ELECTRIC PLATE WARE
Roden Bros., Ltd., Toronto.

ELECTRIC BATTERIES
Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING
Central Press Agency, Toronto

ELECTRICAL SUPPLIES
*Canadian Westinghouse Co., Ltd. Hamilton.
*Jones & Moore Electric Co., Ltd. Toronto.

ELECTRO-SILVER PLATED WARE
Standard Silver Co., Toronto.

ELEVATORS:
*Jenckes Machine Co., Sherbrooke
Turnbull Elevator Mfg. Co., Toronto.
*The Waterous Engine Works Co. Ltd., Brantford.

ELEVATORS FOR ALL PURPOSES
*The Waterous Engine Works Co. Ltd., Brantford.

ELEVATOR GATES AND DOORS
Turnbull Elevator Mfg. Co., Ltd Toronto.

ELEVATOR GUARDS
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.

ELEVATORS, hydraulic and electric
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que

EMERY DRESSERS and STANDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY GRINDERS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL GUARDS
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL Safety Flanges
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS
R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMEL MANUFACTURERS AND DECORATORS
Standard Paint & Varnish Co. Ltd., Windsor, Ont.

ENAMEL AND TIN WARE
McClary Mfg. Co., London, Ont.

ENGINES
*The Canadian Sirocco Co., Windsor, Ont.
*Goldie & McCulloch Co., Ltd. Galt, Ont.
J. & R. Weir, Montreal, Que.
*Polson Iron Works, Ltd., Toronto.
*Sheldons, Ltd., Galt.
*The Waterous Engine Works Co. Ltd., Brantford.

ENGINES, gas and gasoline
Goold-Shapley-Muir Co., Ltd. Brantford, Ont.
*Massey-Harris Co., Ltd., Toronto

ENGINES, gasoline tractor plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting
*M. Beatty & Sons, Welland.
*Waterous Engine Works Co., Ltd. Brantford.

ENGINES, steam plowing and threshing
Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS
Grip, Ltd., Toronto.
Ontario Engraving Co., Hamilton Ont.
Rolph & Clark, Ltd., Toronto.
Stone, Limited, Toronto.

ENGRAVERS, half-tone
Grip, Ltd., Toronto.
Ontario Engraving Co., Hamilton Ont.

ENGRAVERS, wood
Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate
American Bank Note Co., Ottawa. Ont.

ENGRAVERS AND PRINTERS, banknote
American Bank Note Co., Ottawa, Ont.

ENGRAVING:
*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate
Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS
J. Fleury's Sons Aurora, Ont.

ENVELOPES
Barber-Ellis Co., Ltd., Toronto.
Canada Envelope Co., Montreal, Que.

EXCELSIOR PADS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR
Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS
Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES
Ridout & Maybee, Toronto.

EXPLOSIVES, high
Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS
Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery
De Laval Dairy Supply Co., Ltd., Montreal, Que.
J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:
*The Canadian Sirocco Co., Windsor, Ont.
*Sheldons, Ltd., Galt.

FASTENERS, belt
*Sadler & Haworth, Montreal, Que.

FENCES and GATES:
*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire
Banwell Hoxie Wire Fence Co., Hamilton, Ont.
*Canada Wire and Iron Goods Co., Hamilton.

FENCING, wire
The Great West Wire Fence Co., Ltd., Winnipeg, Man.
C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:
*The E. B. Eddy Co., Ltd., Hull.

FILES
Henry Disston & Sons, Ltd., Toronto.
*The Nicholson File Co., Port Hope, Ont.

FIRE DOOR HARDWARE
*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:
*Waterous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:
*Canada Wire and Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS
*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.
*Canadian H. W. Johns-Manville Co., Toronto.
*The General Fire Equipment Co. Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS
*Waterous Engine Works Co., Ltd., Brantford.

FIRE HOSE
*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.
Dunlop Tire and Rubber Goods Co., Limited, Toronto.
*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE-PROOF WINDOWS AND DOORS
*Pedlar People Ltd., Oshawa, Ont.

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FIRE SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FISH, Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE
Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King, Ltd., Montreal, Que.

FLAGS
*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

FLASHLIGHTS
Canadian Carbon Co., Toronto.

FLOORING, hardwood
Seaman Kent Co., Ltd., Meaford, Ont.

FLUE LINERS
Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
*Sheldons, Ltd., Galt.

FORGINGS
Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton.

FORGINGS, DROP
*Dominion Stamping Co., Walkerville, Ont.

FOUNTAIN FRUITS and Juices
J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:
*Dodge Mfg. Co., Ltd., Toronto.

FROGS AND CROSSINGS, manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS
John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and buttons
J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air
Bedford Stove Co., Bedford, Que.

FURNITURE, hall
The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office
Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:
*A. C. Leslie & Co., Montreal.

GALVANIZERS
Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
*The Waterous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground
S. F. Bowser & Co., Toronto.

GASOLINE
*The Imperial Oil Co., Ltd., Toronto.

GENERATORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.

GINS
The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
Dominion Glass Co., Ltd. Montreal, Que.

GLASSWARE, cut
Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS
A. R. Clarke & Co., Ltd., Toronto

GLUE
Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
J. J. McLaughlin, Ltd., Toronto.

GRATES.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

GRAVITY CARRIERS
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES
*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES
The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS
B. J. Coghlin Co., Ltd., Montreal.

GYPSUM, crushed
*Albert Mfg. Co., Hillsborough, N.B.

GYPSUM PRODUCTS
*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HALL FURNITURE
The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

HARDWARE
*Richards Wilcox Canadian Co. Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph Ont.
The Jas. Smart Mfg. Co., Ltd. Brockville. Ont

HARDWOOD FLOORING
Wilson Bros. Ltd., Collingwood Ont.

HARDWOOD INTERIOR FINISH
Wilson Bros. Ltd., Collingwood Ont.

HARDWOOD VENEER DOORS TO DETAIL
Wilson Bros., Ltd., Collingwood Ont.

HARNESS
Lamontagne Ltd., Montreal, Que.

HATS, men's straw
The Crown's Hat Co., Ltd., Galt Ont.

HATS, ladies' and children's straw
The Crown Hat Co., Ltd., Galt Ont.

HATS, ladies' and children's felt and beaver
The Crown Hat Co., Ltd., Galt Ont.

HATS, ladies' felt and straw
Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope
The Dominion Wire Rope Co., Ltd. Montreal.

HEATERS
*The Canadian Sirocco Co., Windsor, Ont.
*Waterous Engine Works Co., Ltd. Brantford.

HEATERS, feed water:
*The Goldie & McCullough Co. Ltd., Galt.

HEATING APPLIANCES:
*Sheldons, Ltd., Galt.

HEATING SYSTEMS
Gurney Foundry Co., Ltd., Toronto.

HESSIANS
The Canadian Bag Co., Ltd., Montreal, Que.
*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

HINGES:
*The Steel Co. of Canada, Ltd Hamilton.

HOISTS
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.
*M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire
*Canadian Consolidated Rubber Co. Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co. Ltd., Toronto.

HOSE, half, Imperial
Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.
*Canadian Consolidated Rubber Co. Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

HUMIDIFIERS
*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES
Bawden Machine Co., Ltd., Toronto.

ICE CREEPERS
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INCUBATORS & BROODERS
Lee Mfg. Co., Ltd., Pembroke, Ont

INJECTORS, automatic and autopositive
Penberthy Injector Co, Ltd. Windsor. Ont.

INSULATION, patent seamless cork
*Canadian H. W. Johns-Manville Co., Toronto.
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER TILING
*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS
Standard Clay Products, Ltd., St. Johns, Que.

IRON:
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar
Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.
*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural
*Canada Wire & Iron Goods Co., Hamilton.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental
*Canada Wire & Iron Goods Co., Hamilton.
The Western Steel & Iron Co., Ltd. Winnipeg, Man.

IRON, LEAD AND PUTTY
A. R. Whittall, Montreal.

JAM, canned goods, etc.
E. D. Smith & Son, Limited.

JAPANS, enamels, etc.
A. Muirhead Co., Ltd., Toronto.

JOINTERS:
*Berlin Machine Works, Ltd., Hamilton.

JELLY POWDER
S. H. Ewing & Sons, Montreal, Que.

JEWELRY, enamelled souvenir
Caron Bros., Montreal, Que.

JEWELRY, gold filled
Caron Bros., Montreal, Que.

JOIST HANGERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

KELSEY WARM AIR GENERATOR
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:
*Sheldons, Ltd., Galt.

KINDLING
Standard Fuel Co., Toronto.

KNIFE GRINDERS:
*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:
*Penman's, Ltd., Paris, Ont.

KNIVES
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper
Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES
Canadian Kodak Co., Ltd., Toronto.

LABELS
Lawson & Jones Ltd., London, Ont.

LABELS, lithographed
Harris Lithographing Co., Toronto.

LACE LEATHER
F. C. McCordick, St. Catharines, Ont.
*Sadler & Haworth, Montreal, Que.
*The D. K. McLaren Belting Co., Ltd., Montreal.
*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step
*Otterville Mfg. Co., Ltd., Otterville. Ont.

LAGER
E. L. Drewry, Winnipeg, Man.

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LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:
Canadian Billings & Spencer Ltd., Welland.

LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD
* The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto.

LEAD PIPE
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER
The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole
The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather
A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.
Clarke & Clarke, Limited, Toronto.

LEATHER, upper
A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED TIN WARE:
*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Company, Ottawa, Ont.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited Toronto.
Rolph & Clark Ltd., Toronto.

LOCKERS:
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chatterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, decking and planking
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).

LUMBER, Douglas fir (Oregon pine)
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, long timbers and spars
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, pickets and lath
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, staves and heading
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, white pine
Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons. Ltd., Galt.

MACHINERY, conveying.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.

MACHINERY, elevating.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.

MACHINERY, flour mill:
*The Goldie & McCullough Co., Ltd., Galt.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY, hoisting, etc.
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works, Ltd., Toronto
J. & R. Weir, Montreal Que
*M. Beatty & Sons, Ltd., Welland, Ont.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
*The Waterous Engine Works Co. Ltd., Brantford.

MACHINERY, pumping
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing
*John Bertram & Sons Co., Ltd. Dundas, Ont.

MACHINERY, railroad and car shop
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene, Ont.
W. P. Plant, Hastings, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, special
Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery
W. P. Plant, Hastings, Ont.

MACHINERY, transmission
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.

MACHINERY, wood working
*Berlin Machine Works, Ltd., Hamilton.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:
*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting
Spramotor Co., London, Ont.

MAGNESITE
Canadian Carbonate Co., Ltd., Montreal, Que.

MAILING TUBES:
*Dominion Paper Box Co., Ltd., Toronto.

MALT:
*Hiram Walker & Sons, Ltd., Walkerville.

MANTELS, wood
W. A. Moore Co., Ltd., Meaford. Ont.

MAPS AND MAP MOUNTING
The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:
*Berlin Machine Works, Ltd., Hamilton.

MATCHES:
*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned
The Wm. Davies Co., Ltd., Toronto.

MECHANICAL DRAUGHT
*Canadian Sirocco Co., Windsor, Ont.

MEDICINES, patented and pharmaceutical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
Alonzo W. Spooner, Limited, Port Hope, Ont.

METAL CEILING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.

METAL ROOFING
*Pedlar People Ltd., Oshawa, Ont.

METAL, spinning and stamping
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SHINGLES:
*Metal Shingle & Siding Co., Ltd., Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.
*Pedlar People, Ltd., Oshawa, Ont.

METAL SIDING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS
Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)
Holt, Renfrew Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)
Holt, Renfrew, Ltd., Quebec, Que.

MONUMENTS
McIntosh Granite Co., Ltd., Toronto.

MORTISERS:
*Berlin Machine Works, Ltd., Hamilton.

MOTOR CAR PARTS AND ACCESSORIES
*Russell Motor Car Co., Ltd., Toronto.

MOTORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd,. Hamilton.

MOTORS, D.C.
*Canadian Crocker Wheeler Co., St. Catharines, Ont.

MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:
*The Gramm Motor Truck Co., Ltd., Walkerville.

MOULDERS:
*Berlin Machine Works, Ltd., Hamilton.

NAILS:
*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAME PLATES
Patterson and Heward, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NUTS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

OAKUM, plumbers', Canadian Navy
Factory Waste and Metal Co., Montreal, Que.
*Scythes & Co., Ltd., Toronto.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.

*For Display Advertisement See Index Page 885

OFFICE STATIONERY:
*The Montreal Lithographing Co., Ltd., Montreal.

OILS
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS
S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES
Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring
S. F. Bowser & Co., Toronto.

OIL COMPANIES
Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)
*British American Oil Co., Ltd., Toronto.

OILS, Petroleum
*The Imperial Oil Co., Ltd., Toronto.

OILCLOTHS, floor and table
Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS
*Goderich Organ Co., Goderich, Ont.

ORGANS
*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe
Casavant Freres, St. Hyacinthe, Qne.

ORGANS, parlour
Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:
*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OSTRICH PLUMES
R. Parker & Co., Toronto.

OVENS, portable bake
Bedford Stove Co., Bedford, Que.

OVERALLS
Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Qne.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS
Rosamond Woollen Co., Aimonte, Ont.

OVERHEAD RUNWAYS.
*Richard-Wilcox Canadian Co., Limited, London, Ont

PACKING BOXES
Barchard & Co., Ltd., Toronto.

PACKING, engine:
*Garlock Packing Co., Hamilton.

PACKING, rubber
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dnnlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gntta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAILS AND TUBS, wooden
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES
A. Mnirhead Co., Ltd., Toronto.

PAINTS
R. C. Jamieson & Co., Ltd., Montreal, Qne

PAINTS and VARNISHES:
A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge
Standard Paint and Varnish Co., Ltd., Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island, Que.

PAPER BOARDS
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal Que.

PAPER, envelope
Provincial Paper Mills Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co., Montreal. Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co., Montreal. Que.

PAPERS, building
Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp and Paper Co. Montreal. Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated box board
*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, enamelled blotting
*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, gummed tapes
Gummed Papers, Ltd., Brampton, Ont.

PAPER, label
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, ledger
*Rolland Paper Co., Ltd., Montreal Que.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co., Cornwall. Ont.

PAPER, wall
Stanntons, Ltd., Toronto.

PAPER, writing
The Toronto Paper Mfg Co. Cornwall. Ont.

PAPER, writing, high-grade
*Rolland Paper Co., Ltd., Montreal Que.

PAPER, writing, superfine
*Rolland Paper Co., Ltd., Montreal Qne.

PAPER BOXES:
*Dominion Paper Box Co., Toronto.

PARK SEATS
Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES
The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

PATENTS
Fetherstonhaugh & Co., Toronto.
Ridout and Maybee, Toronto.

PATENT LITIGATION
Ridout and Maybee, Toronto.

PEAS AND BEANS FOR SEED
W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:
*Canada Wire & Iron Goods Co., Hamilton.

PERFORATED MUSIC ROLLS
The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET PREPARATIONS
Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS
*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS
Dominion Organ & Piano Co., Ltd., Bowmanville. Ont.
*Gourlay, Winter and Leeming, Toronto.

PIANO ACTIONS
The Otto Higel Co., Ltd., Toronto.

PIANO KEYS
The Otto Higel Co., Ltd., Toronto.

PIANOS, player
*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions
The Otto Higel Co., Ltd. Toronto.

PIANO STOOLS and BENCHES
*Goderich Organ Co., Goderich, Ont.

PICKLES
The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS
T. A. Lytle Co., Ltd., Toronto.

PIG IRON:
*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS, ETC.
Wilson Bros., Ltd., Collingwood. Ont.

PINS, society, emblems and Badges
Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:
*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

PIPES, culvert
Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer
Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton. Ont.
Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings
Warden King Ltd., Montreal, Que.

PIPES AND TUBES, wrought merchant
*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off Machines
John H. Hall & Sons, Limited. Brantford, Ont.

PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:
*Berlin Machine Works, Ltd. Hamilton.

PLANING MILLS
G. & J. Esplen, Montreal, Qne.

PLASTER OF PARIS
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, hard wall
*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land
*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:
*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS
J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES
The Garth Co., Montreal, Qne.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:
Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES
Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain
Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

PORK PACKERS AND CHEESE EXPORTERS
The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence
Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS
Stone, Limited, Toronto.

POULTRY SUPPLIES AND MEDICINES
Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting
Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES AND DIES
Brown Boggs Co., Ltd., Hamilton, Ont.

PRESSES, baling
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter
William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic
William R. Perrin & Co., Ltd., Toronto.
*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer
William R. Perrin & Co., Ltd., Toronto.

PRINTERS
Rous & Mann, Ltd., Toronto.
R. G. McLean, Toronto.

PRINTERS, catalogue:
R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.

PRODUCE
The Wm. Davies Co., Ltd., Toronto.

PROPRIETARY MEDICINES
Northrop & Lyman Co., Ltd., Toronto.

PROVISIONS
The Wm. Davies Co., Ltd., Toronto.

PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Jeffrey Mfg. Co., Montreal, Qne.

*For Display Advertisement See Index, Page 885

PULP. Bleached Sulphite
The Edward Partington Pulp and Paper Co., St. John, N.B.

PULP, Sulphide
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PUMPS.
Spramotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

PUMPS, ammonia
*Bawden Machine Co., Ltd., Toronto.

PUMPS, boiler feed.
*Bawden Machine Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.

PUMPS, centrifugal
*M. Beatty & Sons, Ltd., Welland. Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, iron
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, tar
*Bawden Machine Co., Ltd., Toronto.

PUMPS, turbine, and equipment
*Bawden Machine Co., Ltd., Toronto.

PUMPS (Turbine and reciprocating)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

PYJAMAS AND NIGHT ROBES
Williams, Greene & Rome, Berlin, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron:
*Dennis Wire & Iron Works Co., London.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada, Ltd., Montreal, Que.

RAILWAY SUPPLIES.
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal. Que.

RAILWAY TARIFF BINDERS
The Esdale Press Ltd., Edmonton.

READY-TO-WEAR GARMENTS, Ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

"REDWOOD" lager
E. L. Drewry, Winnipeg, Man.

REED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock, Ont.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions.
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT for concrete:
*Canada Wire & Iron Goods Co., Hamilton.
*Pedlar People Ltd., Oshawa, Ont.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETS:
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd. Hamilton.

RIVETS, bifurcated and tubular
Parmenter & Bulloch Co., Ltd. Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Parmenter & Bulloch Co., Ltd Gananoque, Ont.

ROLLERS, shade
Daly & Morin, Montreal, Que.

ROOFING, metal
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd. Preston.

ROOFING, ready to lay
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd. Montreal, Que.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.

ROPE, cotton
Hamilton Cotton Co., Hamilton Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd. Montreal, Que.
*Gutta Percha & Rubber, Ltd.
The Miner Rubber Co., Ltd. Granby, Que.
*Smart-Woods, Ltd., Montreal.

RUBBER GOODS.
*Canadian Consolidated Rubber Co. Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto

RULES
The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.

RYE
The St. Hyacinthe Distillery Co. Ltd., St. Hyacinthe, Que.

SADDLERY HARDWARE
*Dominion Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd. Galt, Ont.

SAMPLE CASES
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal Que.

SANDERS:
*Berlin Machine Works, Ltd. Hamilton.

SANDPAPER
Delany and Pettit, Ltd., Toronto Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton Ont.

SALT
Canadian Salt Co., Ltd., Windsor Ont.

SANITARY PAPER TOWELS:
*E. B. Eddy Co., Ltd., Hull.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt. Ont.

SAWS, band:
*Berlin Machine Works, Ltd. Hamilton.

SAWS, crosscut
*Berlin Machine Works, Ltd. Hamilton.

SAWS, crosscut and oand
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack:
*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip:
*Berlin Machine Works, Ltd., Hamilton.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

SAWS, specialties
*Victor Saw Works, Ltd., Hamilton, Ont.

SCALES
The Gurney Scale Co., Hamilton, Ont.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.

SCREENS:
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREWS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SHAFTING.
Canada Forge Co., Ltd., Welland. Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.

SHANTY BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS:
*Berlin Machine Works, Ltd., Hamilton.

SHEAR BLADES, iron
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING, asbestos corrugated:
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHEET METAL WARE (iron galvanized and enamelled)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.

SHELLAC
*Berry Bros., Ltd., Winnipeg.

SHINGLES, asbestos cement:
*Canadian H. W. Johns-Manville Co,, Toronto.

SHIRTS
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
Peerless Overall Co., Rock Island. Que.
John W. Peck & Co., Ltd., Montreal, Que.
The Standard Shirt Co., Ltd., Montreal, Que.

SHIRTS, workmen's
A. R. Clarke & Co., Ltd., Toronto

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOES, running and athletic
Ames-Holden-McCready, Ltd., Montreal, Que.

SHOOKS
Barchard & Co., Ltd., Montreal. Que.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

SILVERWARE
Toronto Silver Plate Co., Ltd., Toronto.
Standard Silver Co., Toronto.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto.

SINKS, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKATES, figure
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, genuine Acme
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, hockey
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, ice
Canada Cycle & Motor Co., Ltd., Toronto.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS:
*Metallic Roofing Co., Ltd., Toronto.
*Pedlar People Ltd., Oshawa, Ont.

SLEIGHS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

SLIPPERS
Ames-Holden-McCready, Ltd., Montreal, Que.

SOAPS
J. Barsalou & Co., Ltd., Montreal, Que.

SOAP (soft, oil)
The Imperial Varnish & Color Co., Ltd., Toronto.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*The Canada Metal Co., Toronto.

SOLDER, silver
Geo. H. Lees & Co., Hamilton.

SOLDER, wire and bar
*American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPARK PLUGS
Canadian Carbon Co., Ltd., Toronto.

SPIRAL CONVEYORS.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SPLIT PEAS
H. Murton, Guelph, Ont.

SPIKES, railway and marine
Starr Mfg. Co., Ltd., Dartmouth. N.S.

SPIRITS
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto.

SPRAYERS
Spramotor Co., London. Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal, Que.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriages and automobile
Guelph Spring & Axle Co., Ltd., Guelph. Ont.

SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*General Fire Equipment Co., Ltd., Toronto.
*Purdy, Mansell. Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

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